# TANNER'S CREEK MANOR

## 58 DOUGHTY ROAD, LAWRENCEBURG, IN 47025

### SPECIAL INSPECTIONS

SPECIAL INSPECTIONS SHALL BE PERFORMED BY AN EXPERIENCED INSPECTOR. THE INSPECTOR SHALL PROVIDE CREDENTIALS STATING COMPETENCY AND EXPERIENCE FOR APPROVAL PRIOR TO PERFORMING ANY INSPECTIONS.

### EARTHWORK

1. A SOILS ENGINEER SHALL OVERSEE AND TEST ALL COMPACTION WORK AND PROVIDE AN APPROVAL THAT THE BUILDING PAD, DRIVES & PARKING AREAS WERE BUILT AND TESTED IN ACCORDANCE WITH THE SOILS REPORT AND THAT THE PAD IS SUITABLE FOR THE CONSTRUCTION OF THE BUILDING. SUBMIT SOILS FIELD REPORT TO ARCHITECT IMMEDIATELY UPON COMPLETION.

### FOOTINGS

1. AS THE FOOTING GRADE BEAMS ARE EXCAVATED THE SOILS ENGINEER SHALL TEST THE BEARING CAPACITY OF THE FOOTING BOTTOM AND PROVIDE APPROVAL PRIOR TO CONCRETE POUR.
2. THE FOUNDATION STEEL SHALL BE INSPECTED AND APPROVED AS BEING IN COMPLIANCE WITH THE DRAWINGS.

### CONCRETE

1. ARCHITECT TO BE CONTACTED PRIOR TO ALL CONCRETE POURS FOR STRUCTURAL CONCRETE SUCH AS FOOTINGS, THICKENED SLAB AND SLAB ON GRADE SHALL BE INSPECTED. MIX DESIGN AND SLUMP SHALL BE CHECKED AS WELL AS TAKING CYLINDERS FOR TESTING. ANY DISCREPANCIES OR NON-COMPLIANCE WORK SHALL BE NOTED AND REPORTED TO THE CONTRACTOR AND ARCHITECT.

### MASONRY

CONCRETE BLOCK MASONRY SHALL BE PERIODICALLY INSPECTED AS THE FOUNDATION WALLS ARE CONSTRUCTED. THE SUB-CONTRACTOR SHALL INFORM THE INSPECTOR OF THE ANTICIPATED SCHEDULE & ANY ADJUSTMENTS MADE AS WORK PROGRESSES SO THAT THE PROPER INSPECTIONS CAN BE COMPLETED WITHOUT DELAYING WORK. INSPECTIONS SHALL BE AS FOLLOWS:

1. INSPECT INSTALLATION OF DOWELS INTO FOOTINGS.
2. INSPECT AT LEAST ONCE TO VERIFY INSTALLATION & LAPPING OF BARS.
3. INSPECT REINFORCING STEEL & CONCRETE GROUTING OF THE BOND BEAM.

### WOOD FRAMING

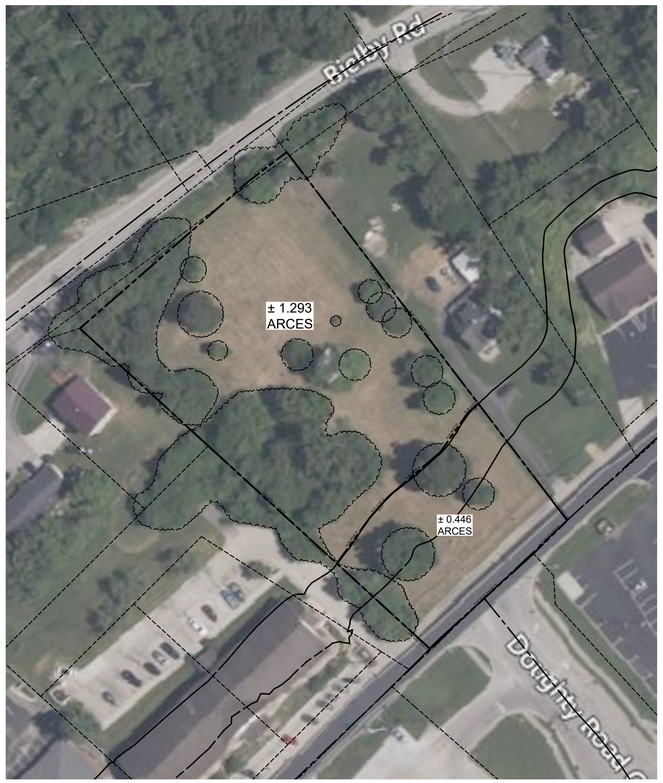
WOOD FRAMING SHALL BE INSPECTED AND APPROVED WITH SPECIAL ATTENTION TO:

1. SIMPSON HOLD-DOWNS AT CORNERS CARRYING UP THRU TO THE ROOF.
2. SPACING AND ADEQUATE HOLD-DOWN OF ANCHOR BOLTS.
3. NAILING OF EXTERIOR WALL SHEATHING AND SHEARWALL PLYWOOD NAILING.
4. NAILING OF CONNECTION BETWEEN TOP AND BOTTOM PLATES AND FLOOR TRUSSES.
5. NAILING OF JOISTS AND TRUSS HANGERS AND HOLD-DOWN CLIPS OF ROOF TRUSSES & FLOOR TRUSSES.
6. CONNECTION OF LEDGERS TO CONCRETE BLOCK AND ASSOCIATED PLYWOOD NAILING TO LEDGER.

### INSULATION

INSPECT AND APPROVE INSULATION FOR COMPLIANCE WITH THE STANDARDS LISTED IN THE IECC. SPECIAL ATTENTION SHOULD BE PAID TO: (SEE CD-1 FOR INSPECTIONS)

1. INSURE ALL SHEATHING PENETRATIONS ARE SEALED.
2. INSURE ALL GAPS IN FRAMING AND INTERSECTIONS OF PLATES TO SHEATHING ARE SEALED.
3. INSPECT THAT ALL GAPS AROUND WINDOWS AND DOORS ARE FOAM SEALED.
4. INSPECT THAT ALL BATT INSULATION IS TIGHT TO STUDS ON EACH SIDE AND AT THE TOP AND BOTTOM. INSULATION SHALL EXTEND COMPLETELY INTO CORNERS. NO DEAD SPACES IN CORNER OR TEE WALL INTERSECTIONS ARE ALLOWED.




SITE AERIAL

SCALE: 1" = 60'

NORTH

0 15 30 60 120

GRAPHIC SCALE

## LIST OF DRAWINGS

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| 24. | A1-5 | BUILDING ROOF PLAN |
| 25. | A2-1 | 1/4" UNITS PLANS |
| 26. | A2-2 | 1/4" UNITS PLANS |
| 27. | A2-3 | ENLARGED GROUND FLOOR PLAN |
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| 29. | A3-1 | INTERIOR ELEVATIONS |
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| 46. | A7-11 | FLAT ROOF SECTIONS |
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| 48. | F1-2 | BUILDING FLOOR FRAMING PLAN |
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| 50. | F1-4 | BUILDING ROOF FRAMING PLANS |
| 51. | F1-5 | HOLD-DOWN SHEARWALL & STUD SCHEDULE PLAN |
| 52. | F1-6 | HOLD-DOWN SHEARWALL & STUD SCHEDULE PLAN |
| 53. | F1-7 | HOLD-DOWN SHEARWALL & STUD SCHEDULE PLAN |
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| NO. | SHEET | TITLE |
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| 66. | P1-6 | BUILDING RADON PLANS |
| 67. | P2-1 | 1/4" UNIT PLUMBING PLANS |
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| 74. | H1-3 | THIRD FLOOR BUILDING HVAC PLAN |
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| 76. | H2-1 | 1/4" UNIT HVAC PLANS |
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| 83. | E1-3 | THIRD FLOOR BUILDING ELECTRICAL PLANS |
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| 85. | E1-5 | BUILDING CABLE PLAN |
| 86. | E2-1 | 1/4" UNIT ELECTRICAL PLANS |
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| 88. | E2-3 | ENLARGED ELECTRICAL PLANS |
| 89. | E3-1 | ELECTRICAL LIGHT FIXTURE SCHEDULE, NOTES & DETAILS |
| 90. | E3-2 | ELECTRICAL PANELS |
| 91. | E3-3 | ELECTRICAL FIRESTOP SYSTEMS |
| 92. | E3-4 | ELECTRICAL FIRESTOP SYSTEMS |

### SYMBOLS LEGEND

- CODED NOTE - SEE CODED LIST
- DOOR NUMBER - SEE DOOR SCHEDULE
  HEADER/COLUMN NUMBER - SEE FRAMING PLANS
  SPECIAL OUTLET - SEE ELECTRICAL PLANS
- WINDOW NUMBER - SEE WINDOW SCHEDULE
- REVISION MARKER
- FOUNDATION DETAIL MARKER - SEE FOUNDATION DETAILS
- WALL TYPE MARKER - SEE CODE DATA SHEET
- LEVEL MARKER

**INTERIOR ELEVATION MARKER**

Sheet # / Optional
- INDICATES DIRECTION
- INDICATES ELEVATION LETTER
- INDICATES SHEET NUMBER
- INDICATES OPPOSITE HAND OR SIMILAR

**DETAIL MARKER**

#1 / A-#1
- INDICATES DETAIL NUMBER
- INDICATES SHEET NUMBER

**SECTION MARKER**

#1 / A-#1
- INDICATES SECTION NUMBER
- INDICATES SHEET NUMBER

**COMMON ROOM TAG** - SEE FINISH SCHEDULE

ROOM NAME
- INDICATES ROOM NAME
- INDICATES ROOM NUMBER

**UNIT ROOM TAG** - SEE FINISH SCHEDULE

BR / A / (504)
- INDICATES NUMBER OF BEDROOMS
- INDICATES UNIT TYPE
- INDICATES ROOM NUMBER
- INDICATES (504)(TYPE A OR B ) OR SENSORY UNIT

**MATCH LINE MARKER**

SHEET# SHEET#
- INDICATES DIRECTION OF MATCH LINE
- INDICATES SHEET NUMBER

**PARTIAL ELEVATION MARKER**

ELEVATION INDICATOR
- INDICATES ELEVATION NUMBER, SHEET NUMBER & DIRECTION OF ELEVATION


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DATE: 06/26/2026

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- ☐ SUBMISSION SET 06/27/2025
- ☐ ZONING SET 05/07/2026
- ■ BID SET 06/26/2026
- ☐ PERMIT SET
- ☐ CONSTRUCTION SET


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## UNIT SUMMARY BREAKDOWN

| UNIT | UNIT TYPE | UNIT NET AREA | 1ST FLOOR | 2ND FLOOR | 3RD FLOOR | 4TH FLOOR | TOTAL UNITS | TOTAL UNIT AREA |
|---|---|---|---|---|---|---|---|---|
| A | ONE BEDROOM APT. (TYPE B - ADAPTABLE) | 681 SQ.FT. | 1 | 5 | 6 | 6 | 18 | 12,258 SQ.FT. |
| A1 | ONE BEDROOM APT. (TYPE A - ACCESSIBLE)(504) | 681 SQ.FT. | 2 | 2 | 1 | 1 | 6 | 4,086 SQ.FT. |
| A2 | ONE BEDROOM APT. (TYPE B - ADAPTABLE) | 684 SQ.FT. | | 1 | 1 | | 2 | 1,368 SQ.FT. |
| A3A | ONE BEDROOM APT. (TYPE B - ADAPTABLE) | 684 SQ.FT. | | 1 | 1 | | 2 | 1,368 SQ.FT. |
| A3B | ONE BEDROOM APT. (TYPE B - ADAPTABLE) | 684 SQ.FT. | | 1 | 1 | 1 | 3 | 2,052 SQ.FT. |
| | SUB-TOTAL | | 3 | 10 | 10 | 8 | 31 | 21,132 SQ.FT. |
| | | | | | | | | |
| B | TWO BEDROOM APT. (TYPE B - ADAPTABLE) | 878 SQ.FT. | 1 | 2 | 2 | 2 | 7 | 6,146 SQ.FT. |
| B1 | TWO BEDROOM APT. (TYPE A - ACCESSIBLE)(504) | 885 SQ.FT. | 1 | 1 | 1 | 1 | 4 | 3,540 SQ.FT. |
| B2 | TWO BEDROOM APT. (TYPE B - ADAPTABLE) | 881 SQ.FT. | 1 | 1 | 1 | 1 | 4 | 3,524 SQ.FT. |
| | SUB-TOTAL | | 3 | 4 | 4 | 4 | 15 | 13,210 SQ.FT. |
| | GRAND TOTAL | | 6 | 14 | 14 | 12 | 46 | 34,342 SQ.FT. |

TYPE A - ACCESSIBLE UNITS = 10
TYPE B - ADAPTABLE UNITS = 31
TOTAL UNITS = 46

## BUILDING GROSS AREA SUMMARY

TOTAL GROSS AREA
GROUND FLOOR = 1,912 SQ.FT.
FIRST FLOOR = 8,138 SQ.FT.
SECOND FLOOR = 12,601 SQ.FT.
THIRD FLOOR = 12,601 SQ.FT.
FOURTH FLOOR = 11,142 SQ.FT.
TOTAL = 46,394 SQ.FT.

## LEED

TANNER'S CREEK MANOR WILL STRIVE TO ACHIEVE GREEN BUILDING CERTIFICATION FROM LEADERSHIP IN ENERGY & ENVIRONMENTAL DESIGN (LEED), SILVER.

## FORTIFIED ROOF

TANNER'S CREEK MANOR WILL MEET FORTIFIED ROOF REQUIREMENTS PER THE FORTIFIED MULTI-FAMILY 2025 WIND NEW CONSTRUCTION & NEW ADDITIONS CRITERIA PER THE INSURANCE INSTITUTE FOR BUSINESS & HOME SAFETY (IBNS).

## WELL HEALTH - SAFETY RATING

TANNER'S CREEK MANOR WILL ACHIEVE A WELL - HEALTH RATING SAFE RATING PER THE INTERNATIONAL WELL BUILDING INSTITUTE (IWBI).

## DEAF & HARD OF HEARING QUALITY OF LIFE FEATURES

EQUIPMENT TO BE PROVIDED BY TELTEX, INC.

## DEVELOPMENT AMENITIES

### COMMON AREAS

| COLUMN A | COLUMN B | COLUMN C |
|---|---|---|
| 1D. FENCED-IN DOG WALKING AREA WITH A WASTE DISPOSAL CONTAINER. | 10D. COMMON AREA LAUNDRY FACILITY OF REASONABLE SIZE IN EACH BUILDING OF A MULTIFAMILY DEVELOPMENT OR IN A COMMUNITY BUILDING IN A DEVELOPMENT CONSISTING OF SINGLE-FAMILY HOMES, DUPLEXES, TRIPLEXES, OR TOWNHOMES. | 17D. MULTIPLE FLOOR PLANS (MORE THAN ONE FLOOR PLAN PER UNIT SIZE). |
| 2D. COMMUNITY ROOM OF REASONABLE SIZE, COMPLETE WITH SEATING AND TABLE(S). | 11D. HANDS-FREE FEATURES IN COMMON AREA BATHROOMS AND KITCHENS AND HAND-SANITIZER STATIONS IN COMMON AREAS. | 18D. THREE-DIMENSIONAL ARCHITECTURAL ROOFING SHINGLES WITH A 30-YEAR WARRANTY. |
| 3D. DESIGNATED GARDEN AREA TO INCLUDE AN AREA FOR THE GROWING OF VEGETABLES. AREA SHALL INCLUDE RAISED PLANTING BEDS FOR EASE OF USE FOR THE ELDERLY. | | |
| 4D. PICNIC AREA WITH PICNIC TABLES, SEATING, AND PERMANENTLY INSTALLED CAST IRON GRILL(S). | | |
| 5D. EXERCISE ROOM- REASONABLY SIZED, DESIGNATED ROOM WITH EXERCISE EQUIPMENT FOR MORE THAN ONE TYPE OF EXERCISE, APPROPRIATE TO THE TENANTS. | | |
| 6D. NATIVE PLANTS USED IN LANDSCAPING. | | |
| SUBTOTAL = 6 | SUBTOTAL = 2 | SUBTOTAL = 2 |

### APARTMENT UNITS

| COLUMN A | COLUMN B | |
|---|---|---|
| 7D. A MINIMUM OF ONE WALK-IN CLOTHES CLOSET IN EACH UNIT WITH A CLEAR FLOOR SPACE OF 16 SQ.FT. EXCLUDING STORAGE SPACE (STORAGE SPACE BEING DEFINED AS A VERTICAL PLAN PARALLEL WITH THE WALLS, MEASURED 12" OUT HORIZONTALLY FROM THE FACE OF THE CLOTHES HANGING RODS AND EXTENDING TO THE FLOOR). | 12D. GARBAGE DISPOSAL FOR EACH UNIT'S KITCHEN SINK. | |
| | 13D. BUILT-IN DISHWASHER IN EACH UNIT. | |
| | 14D. CEILING FAN (MINIMUM ONE IN EACH UNIT). | |
| 8D. CEILING LIGHTS IN EACH BEDROOM CONTROLLED BY A LIGHT SWITCH LOCATED NEXT TO THE BEDROOM DOOR. | | |
| SUBTOTAL = 2 | SUBTOTAL = 3 | |

### SAFETY & SECURITY

| COLUMN A | COLUMN B | |
|---|---|---|
| 9D. SECURITY CAMERAS AT ALL BUILDING ENTRANCES. MUST BE MONITORED OR RECORDED. | 15D. ABC OR KITCHEN-TYPE FIRE EXTINGUISHERS IN ALL UNITS. MUST BE QUICKLY ACCESSIBLE NEAR THE KITCHEN BUT LOCATED AWAY FROM THE RANGE TOP. | |
| | 16D. KITCHEN FIRE BLANKET IN EACH UNIT IN A LOCATION THAT IS QUICKLY ACCESSIBLE NEAR THE KITCHEN BUT LOCATED AWAY FROM THE RANGE. | |
| SUBTOTAL = 1 | SUBTOTAL = 2 | |
| TOTAL = 9 | TOTAL = 7 | TOTAL = 2 TOTAL = 18 |

## UNIVERSAL DESIGN FEATURES

| COLUMN A | COLUMN B | COLUMN C |
|---|---|---|
| 1U. FRONT LOADING WASHER AND DRYER WITH FRONT CONTROLS, RAISED ON PLATFORMS OR DRAWERS, OR ALL LAUNDRY FACILITIES. | 10U. ADJUSTABLE HEIGHT SHELVES IN KITCHEN WALL CABINETS IN EACH UNIT. | 19U. LIGHT SWITCHES LOCATED 48" MAXIMUM ABOVE THE FINISHED FLOOR IN EACH UNIT. |
| 2U. RANGE/OVEN WITH CONTROLS LOCATED IN A POSITION THAT DOES NOT REQUIRE REACHING OVER BURNERS IN 10% OF THE UNITS. | 11U. KITCHEN AND BATHROOM COUNTERTOPS WITH A VISUAL CONTRAST AT THE FRONT EDGE OF THE COUNTER OR BETWEEN THE COUNTER AND THE CABINET IN EACH UNIT. | 20U. ROCKER OR TOUCH SENSITIVE LIGHTING CONTROLS IN EACH UNIT. |
| 3U. LOW-POWER AUTOMATIC DOORS AT ACCESSIBLE EXTERIOR ENTRANCES. | 12U. A 30" x 48" CLEAR FLOOR SPACE IN EACH BATHROOM. IF THE BATHROOM DOORS SWING IN, THE CLEAR FLOOR SPACE MUST BE BEYOND THE SWING OF THE DOOR. | 21U. MIRRORS OVER BATHROOM SINKS HAVE THE REFLECTING SURFACE 40" MAXIMUM ABOVE THE FLOOR OR TILT TO PROVIDE A SIMILAR VIEW IN EACH UNIT. |
| 4U. CURB CUTS ALONG AN ACCESSIBLE ROUTE THROUGHOUT THE DEVELOPMENT IN ACCORDANCE WITH 2009 ICC A117.1 SECTION 406.13. | 13U. WHERE WALLS ARE ADJACENT TO TOILETS, BATHTUBS, OR SHOWERS, PROVIDE BLOCKING FOR FUTURE INSTALLATION OF GRAB BARS IN EACH UNIT IN ACCORDANCE WITH ICC A117.1 SECTION 1004.11.1. UNIT PLANS MUST DEMONSTRATE THE BLOCKING. | 22U. LEVER HANDLE FAUCETS ON SINKS IN EACH UNIT. |
| 5U. KITCHEN SINK AND WORK SURFACE IN ACCORDANCE WITH ICC A117.1 SECTIONS 1003.12.3.2 AND 1003.12.4.2 IN 10% OF THE UNITS. | | 23U. SIGNAGE IDENTIFYING UNIT NUMBERS INCLUDES VISUAL CHARACTERS, RAISED CHARACTERS, AND BRAILLE. |
| 6U. DISHWASHER WITH ALL OPERABLE PARTS AND SHELVING BETWEEN 15" AND 48" ABOVE THE FLOORING IN 10% OF THE UNITS. | 14U. KITCHEN SINK WITH A PULLOUT FAUCET INSTEAD OF SIDE MOUNT SPRAYER IN EACH UNIT. | 24U. PULL HANDLES ON DRAWERS AND CABINET DOORS IN EACH UNIT. |
| 7U. A WALK-IN SHOWER WITH A FIXED OR FOLD DOWN SEAT OR A BATHTUB WITH A SEAT IN AT LEAST ONE BATHROOM IN 10% OF THE UNITS. | 15U. MEANS OF IDENTIFYING VISITORS WITHOUT OPENING THE DOOR IN EACH UNIT. | 25U. LEVERED HARDWARE ON ALL DOORS INTENDED FOR PASSAGE IN EACH UNIT. |
| 8U. GRAB BARS INSTALLED AT TUB/SHOWER IN 10% OF THE UNITS (IN ONE BATHROOM ONLY FOR TWO- BATHROOM UNITS). | 16U. SIGNIFICANT COLOR CONTRAST BETWEEN FLOOR SURFACES, WALLS, AND TRIM IN EACH UNIT. | 26U. ELECTRICAL OUTLETS RAISED A MINIMUM OF 15" ABOVE THE FINISHED FLOOR IN EACH UNIT. DEDICATED OUTLETS AND FLOOR OUTLETS ARE NOT REQUIRED TO MEET THIS STANDARD. |
| 9U. SLIP RESISTANT FLOORING OR CARPET IN EACH UNIT COMPLYING WITH ICC A117.1 SECTION 302.2. | 17U. HANDRAILS INSTALLED IN ALL COMMON AREA CORRIDORS. | 27U. TOILETS WITH SEAT HEIGHT OF 17-19" AT LEAST ONE BATHROOM IN EACH UNIT. |
| 28U.IN 10% OF THE UNITS, COOK TOP WITH TOE & KNEE CLEARANCE IN ACCORDANCE WITH ICC A117.1 SECTION 1003.12.5.4.2. THE UNDERSIDE OF THE COOK TOP SHALL BE INSULATED OR OTHERWISE CONFIGURED TO PROTECT FROM BURNS, ABRASIONS, OR ELECTRIC SHOCK. | 18U. CORDLESS WINDOW BLINDS ON EVERY WINDOW IN EACH UNIT. | 30U. MAILBOXES LOCATED BETWEEN 24- 48" ABOVE GRADE. |
| | 29U. REMOTE CONTROL HEATING AND COOLING IN EACH UNIT CONTROL VIA A PHONE OR TABLET APPLICATION IS ACCEPTABLE. | |
| TOTAL = 10 | TOTAL = 10 | TOTAL = 10 |


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PROJECT:

TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

PROJECT INFORMATION

DATE: 06/26/2026
REVISED:

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GEORGE J. KONTOGIANNIS, LICENSE #AR00034309
EXPIRATION DATE 12/31/2027


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- ☐ SUBMISSION SET 06/27/2025
- ☐ ZONING SET 05/07/2026
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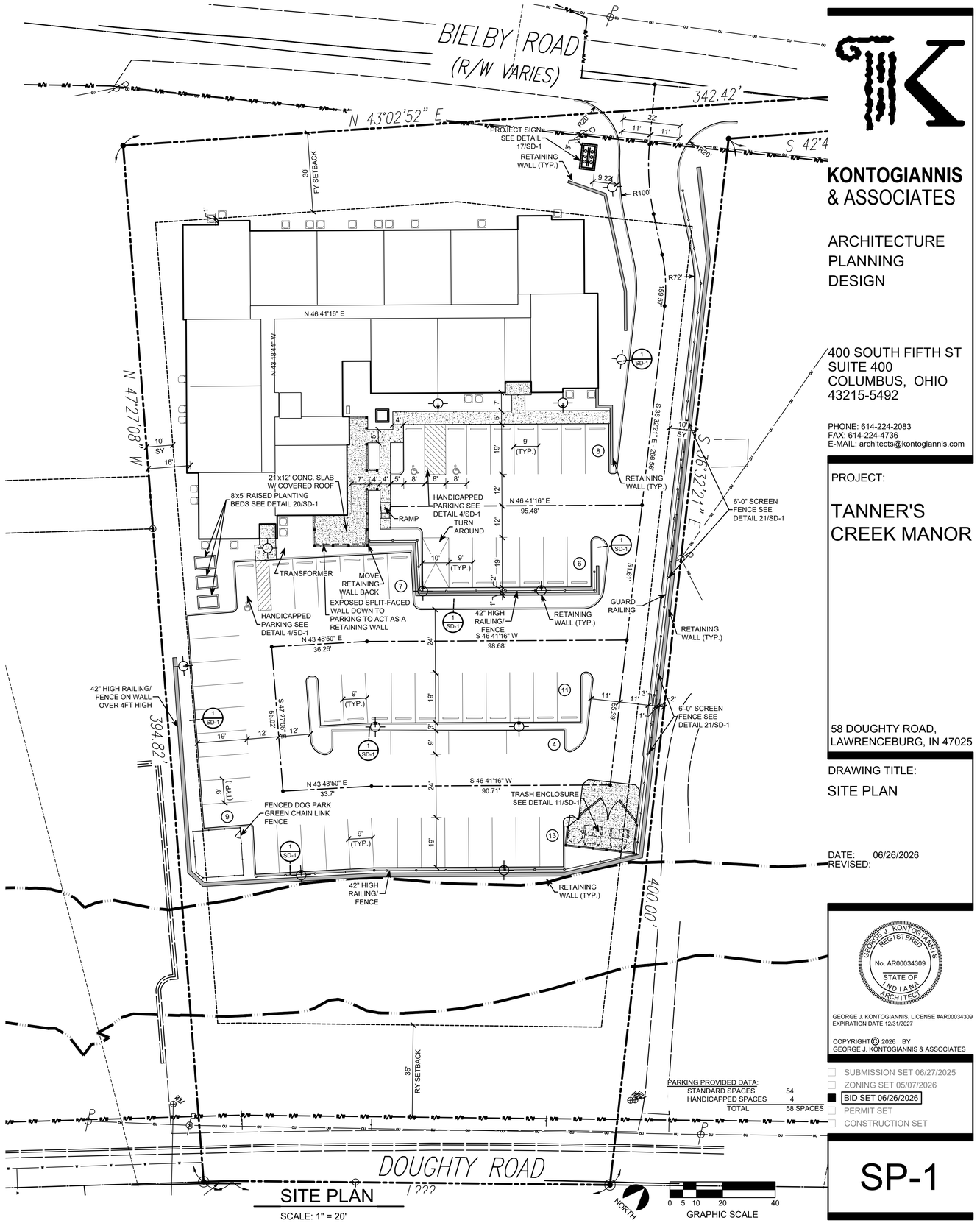
- ☐ PERMIT SET
- ☐ CONSTRUCTION SET

PI-1


H:\Projects\Architects\Current\Tanner's Creek Manor - IN Tax Credit - Spire\AutoCAD\PI-1.dwg, 6/26/2026 2:21:23 PM, CR




SITE PLAN

SCALE: 1" = 20'

PARKING PROVIDED DATA:

| | |
|---|---|
| STANDARD SPACES | 54 |
| HANDICAPPED SPACES | 4 |
| TOTAL | 58 SPACES |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PROJECT:

# TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

SITE PLAN

DATE: 06/26/2026
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GEORGE J. KONTOGIANNIS REGISTERED No. AR00034309 STATE OF INDIANA ARCHITECT

GEORGE J. KONTOGIANNIS, LICENSE #AR00034309
EXPIRATION DATE 12/31/2027


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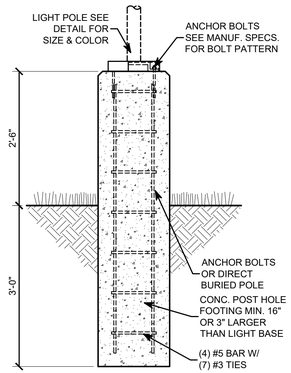
- ☐ SUBMISSION SET 06/27/2025
- ☐ ZONING SET 05/07/2026
- ■ BID SET 06/26/2026
- ☐ PERMIT SET
- ☐ CONSTRUCTION SET

SP-1


H:\Projects\Architects\Current\Tanner's Creek Manor - IN Tax Credit - Spire\AutoCAD\Site Plans\SP-1.dwg, 6/26/2026 2:03:27 PM, MH

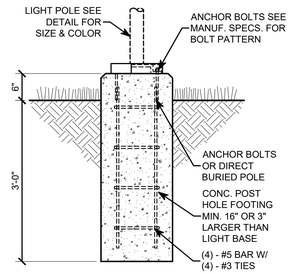
## SITE LIGHT FIXTURE SCHEDULE

| MARK | MANUFACTURER | CATALOG NUMBER | LAMP | MT'G. TYPE | REMARKS |
|---|---|---|---|---|---|
| AA | NLS LIGHTING LLC | NV-1-T4-32L-7-30K8-UNV-HSS | 71W LED 3000K | SEE DETAIL A/SE-1 | CUT OFF LIGHT, COLOR BLACK |
| BB | NLS LIGHTING LLC | NV-1-T5-32L-7-30K8-UNV | 71W LED 3000K | SEE DETAIL A/SE-1 | CUT OFF LIGHT, COLOR BLACK |
| CC | NLS LIGHTING LLC | NV-1-T3-32L-7-30K8-UNV-HSS | 71W LED 3000K | SEE DETAIL A/SE-1 | CUT OFF LIGHT, COLOR BLACK |
| DD | NLS LIGHTING LLC | NV-1-T4-32L-7-30K8-UNV-HSS | 71W LED 3000K | SEE DETAIL B/SE-1 | CUT OFF LIGHT, COLOR BLACK |
| EE | NLS LIGHTING LLC | NV-1-T5-32L-7-30K8-UNV | 71W LED 3000K | SEE DETAIL B/SE-1 | CUT OFF LIGHT, COLOR BLACK |
| FF | RAB LIGHTING | WPLED26Y | 26W LED 3000K | WALL MOUNTED | MOUNT IN LINE WITH BOTTOM OF 2ND FL WINDOW ≈ 12'-6" A.F.F. |
| | | | | | |



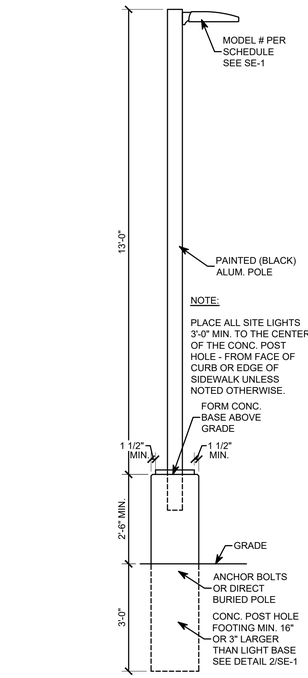

POLE FOUNDATION DETAIL (2)

SCALE: 3/4" = 1'-0"



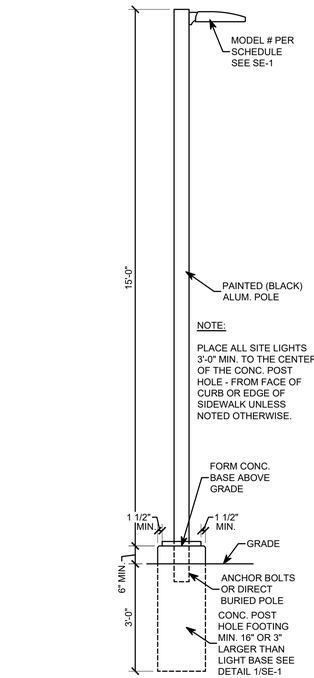

POLE FOUNDATION DETAIL (1)

SCALE: 3/4" = 1'-0"



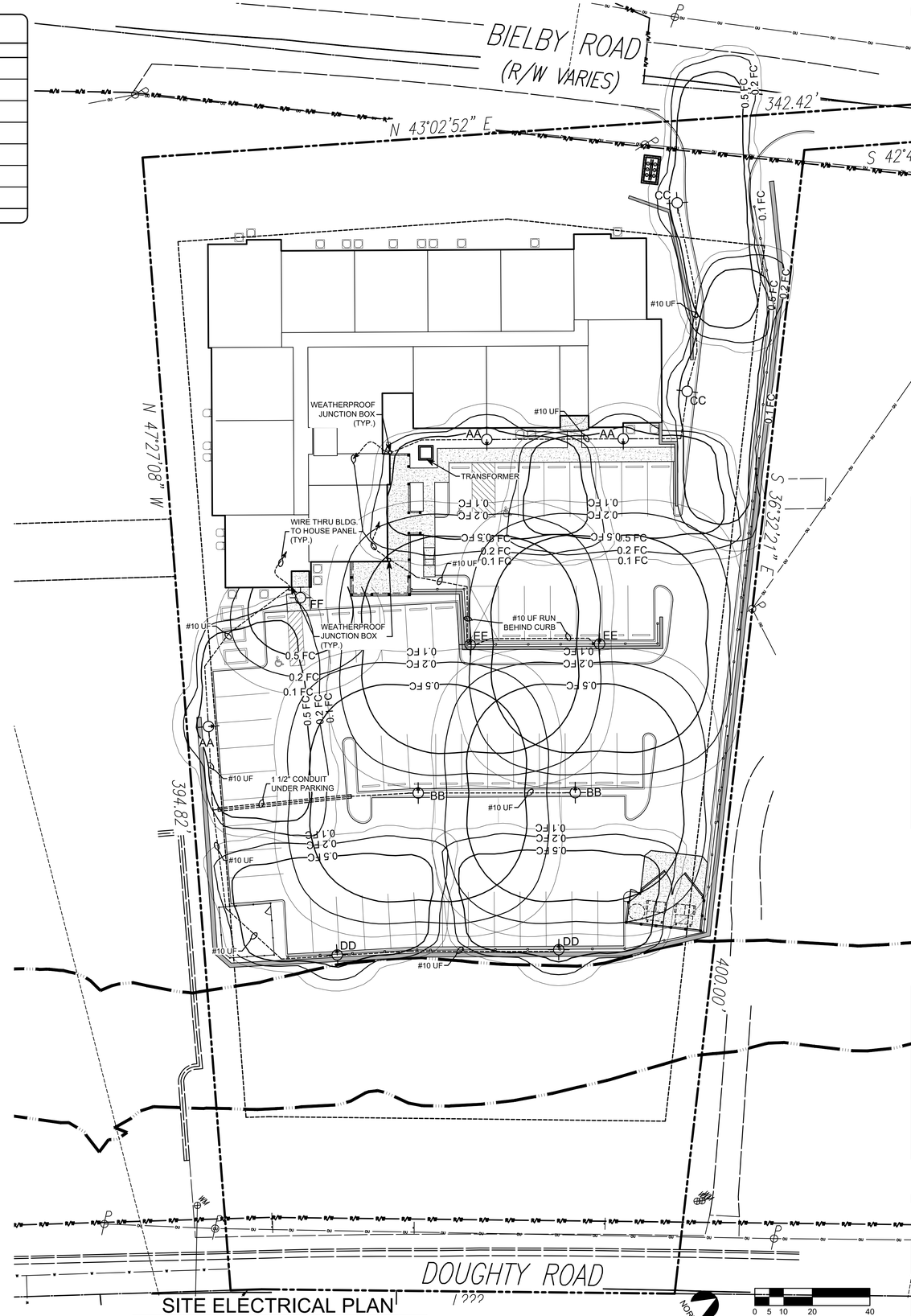

LIGHT & POLE DETAIL (B)

SCALE: 1/2" = 1'-0"




LIGHT & POLE DETAIL (A)

SCALE: 1/2" = 1'-0"




SITE ELECTRICAL PLAN

SCALE: 1" = 20'


KONTOGIANNIS & ASSOCIATES

ARCHITECTURE
PLANNING
DESIGN

400 SOUTH FIFTH ST
SUITE 400
COLUMBUS, OHIO
43215-5492

PHONE: 614-224-2083
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E-MAIL: architects@kontogiannis.com


PROJECT:

# TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

SITE ELECTRICAL PLAN

DATE: 06/26/2026
REVISED:

GEORGE J. KONTOGIANNIS REGISTERED No. AR00034309 STATE OF INDIANA ARCHITECT

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SE-1


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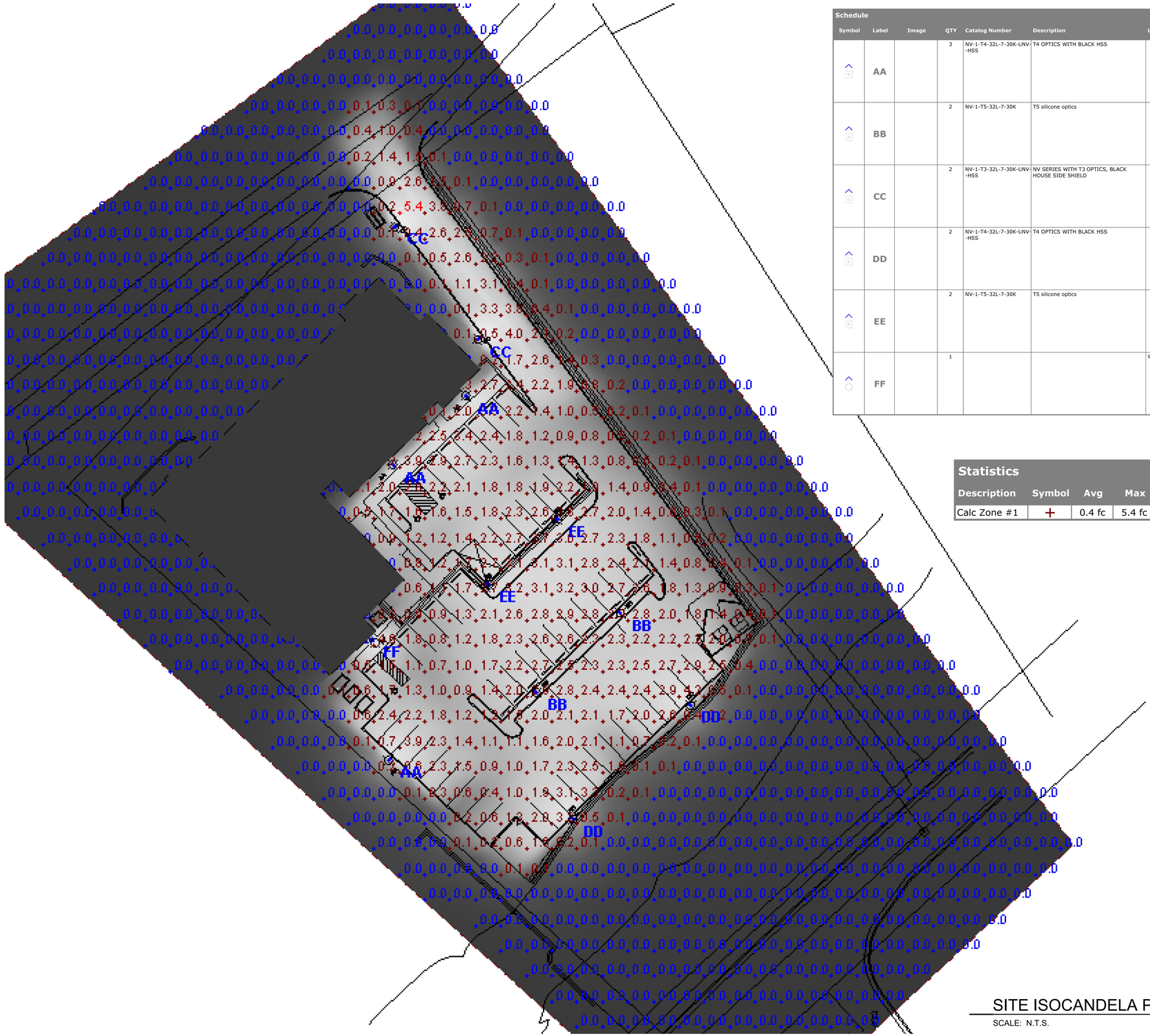


**Schedule**

| Symbol | Label | Image | QTY | Catalog Number | Description | Lamp | Number Lamps | Lumens per Lamp | LLF | Wattage | Polar Plot |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | AA | | 3 | NV-1-T4-32L-7-30K-UNV--HSS | T4 OPTICS WITH BLACK HSS | | 1 | 4403 | 1 | 71 | Max: 4661cd |
| | BB | | 2 | NV-1-T5-32L-7-30K | T5 silicone optics | | 1 | 7877 | 1 | 71 | Max: 3322cd |
| | CC | | 2 | NV-1-T3-32L-7-30K-UNV--HSS | NV SERIES WITH T3 OPTICS, BLACK HOUSE SIDE SHIELD | | 1 | 4475 | 1 | 71 | Max: 7031cd |
| | DD | | 2 | NV-1-T4-32L-7-30K-UNV--HSS | T4 OPTICS WITH BLACK HSS | | 1 | 4403 | 1 | 71 | Max: 4661cd |
| | EE | | 2 | NV-1-T5-32L-7-30K | T5 silicone optics | | 1 | 7877 | 1 | 71 | Max: 3322cd |
| | FF | | 1 | | | WPLED26Y | 1 | 3268 | 1 | 29.4922 | Max: 1940cd |

**Statistics**

| Description | Symbol | Avg | Max | Min | Max/Min | Avg/Min |
|---|---|---|---|---|---|---|
| Calc Zone #1 | + | 0.4 fc | 5.4 fc | 0.0 fc | N/A | N/A |

SITE ISOCANDELA PLAN

SCALE: N.T.S.


KONTOGIANNIS & ASSOCIATES

ARCHITECTURE
PLANNING
DESIGN

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SE-2


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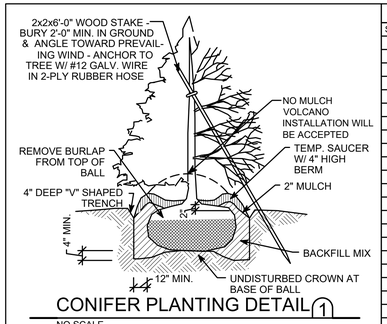
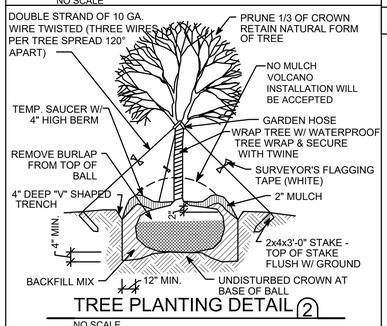


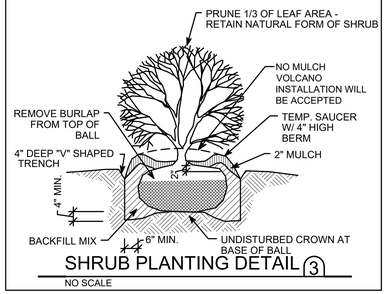

CONIFER PLANTING DETAIL (1)

NO SCALE




TREE PLANTING DETAIL (2)

NO SCALE

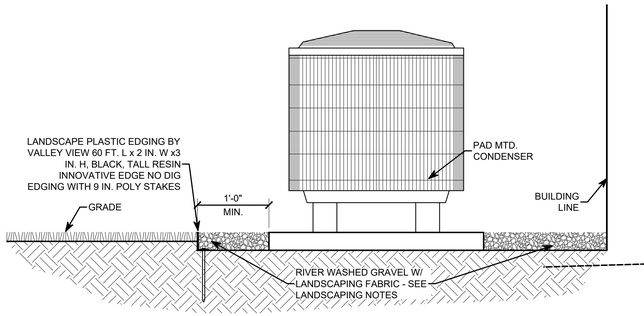



SHRUB PLANTING DETAIL (3)

NO SCALE

## PLANT LIST

| SYMBOL | COMMON NAME | BOTANICAL NAME | SIZE | QTY. |
|---|---|---|---|---|
| DECIDUOUS TREES | | | | |
| NRO | NORTHERN RED OAK | QUERCUS RUBRA | 2" MIN CALIPER. | |
| OGM | RED MAPLE | ACER RUBRUM "AUTUMN FLAME" | 2" MIN CALIPER. | |
| SY | SYCAMORE | PLATANUS OCCIDENTALIS | 2" MIN CALIPER. | |
| RB | RIVER BIRCH | BETULA NIGRA "HERITAGE" | 2" MIN CALIPER. | |
| | | | | |
| ORNAMENTAL TREES | | | | |
| ERB | EASTERN RED BUD | CERCIS CANADENSIS | 2" MIN CALIPER (TREE FORM) | |
| SB | SERVICEBERRY, DOWNY | AMELANCHIER ARBOREA | 2" MIN CALIPER (TREE FORM) | |
| | | | | |
| EVERGREEN TREES | | | | |
| EWP | EASTERN WHITE PINE | PINUS STROBUS "FASTIGIATA" | 6'-0" HIGH 1 1/2" MIN. CALIPER | |
| ERC | EASTERN RED CEDAR | JUNIPERUS VIRGINIAN | 6'-0" HIGH 1 1/2" MIN. CALIPER | |
| PAV | PYRAMIDAL ARBORVITAE | THUJA OCCIDENTALIS "EMERALD GREEN" | 6'-0" HIGH 1 1/2" MIN. CALIPER | |
| | | | | |
| SHRUBS | | | | |
| TD | TAXUS x MEDIA 'DENSIFORMIS" | DENSIFORMIS | 24" HIGH (2 GALLON) | |
| TC | TAXUS CUSPIDATA | "CAPITATA" | 48" HIGH MIN. (5 GALLON) | |
| BR | BLUE RUG | WILTONII "BLUE RUG" | 15" HIGH (1 GALLON) | |
| KB | KOREAN BOXWOOD | B. MICROPHYLLA "LITTLE LEAF" | 24" HIGH (2 GALLON) | |
| | | | | |
| ORNAMENTAL GRASSES | | | | |
| LB | LITTLE BLUESTEM | SCHIZACHYRIUM SCOPARIUM "BLUE PARADISE" (PRARIE WINDS) | 1 GALLON POT | |




LANDSCAPE DETAIL (4)

SCALE: 1" = 1'-0"

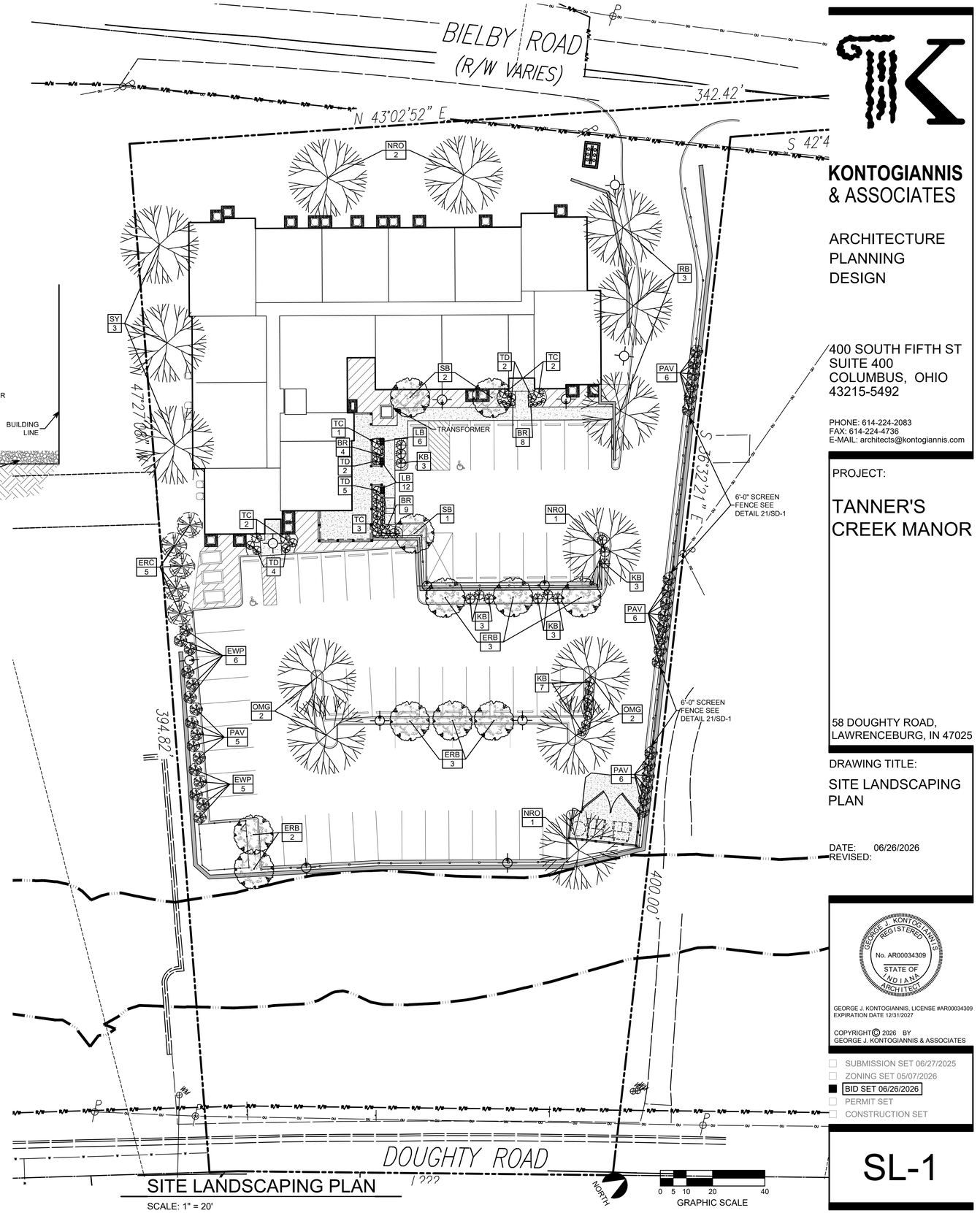
## GENERAL LANDSCAPING NOTES & SYMBOLS

SYMBOLS

- AREAS TO BE SODDED
- AREAS TO BE SEEDED
- AREAS TO BE 1 1/2" - 3" WASHED GRAVELED
- POLE MOUNT LIGHT
- WALL MOUNT LIGHT
- 00 PLANT TYPE
- 00 PLANT QUANTITY

NOTE:

1. LANDSCAPE CONTRACTOR TO VERIFY LOCATIONS OF ALL UNDERGROUND UTILITIES & MAKE MINOR ADJUSTMENTS TO TREE & PLANT LOCATIONS TO AVOID CONFLICTS.
2. PLANT QUANTITIES HAVE BEEN PROVIDED FOR CONVENIENCE ONLY; LANDSCAPING CONTRACTOR TO VERIFY ALL PLANT QUANTITIES.
3. ALL MATERIALS TO BE BALLED AND BURLAPPED OR CONTAINER GROWN UNLESS OTHERWISE NOTED. PLANTS ARE TO BE REMOVED FROM CONTAINERS, CAGES & NON-BIODEGRADABLE MATERIALS.
4. ALL DEAD TREES TO BE REMOVED AND CLEARED.
5. ALL EXISTING TREES TO REMAIN ON SITE: CLEAN ALL BRUSH & PRUNE DEAD BRANCHES. TRIM TO NATURAL SHAPE. PROTECT TO DRIP LINE WITH ORANGE CONSTRUCTION MESH & SIGN DURING CONSTRUCTION, EXCEPT THOSE SHOWN BELOW TO BE REMOVED / REPLACED
6. AT LOCATIONS SHOWN PROVIDE PLASTIC EDGING 12" FROM THE EDGE OF THE CONDENSER PADS & PROVIDE 1 1/2" - 3" WASHED GRAVEL 3"-4" DEEP AT ALL SHADED AREAS TYP. SHOWN AS GRAVELED AREAS ABOVE. SEE RIVED WASHED GRAVEL DETAIL.
7. PROVIDE WEED BARRIER LANDSCAPE FABRIC AT ALL MULCH BEDS & RIVER WASHED GRAVEL LOCATIONS.
8. AT ALL PLANTING BEDS PROVIDE 2" OF HARDWOOD MUCH.




SITE LANDSCAPING PLAN

SCALE: 1" = 20'


KONTOGIANNIS & ASSOCIATES

ARCHITECTURE
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DESIGN

400 SOUTH FIFTH ST
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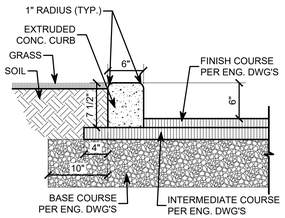
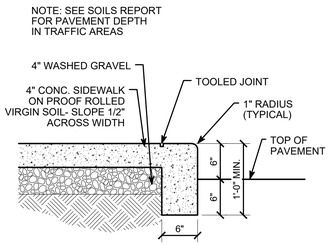


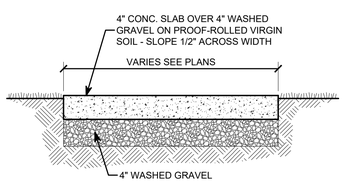

## CURB DETAIL 1

SCALE: 1"=1'-0"



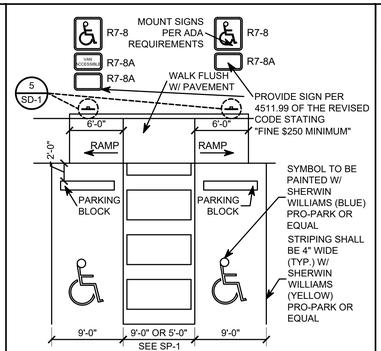

## SIDEWALK & CURB DETAIL 2

SCALE: 1"=1'-0"



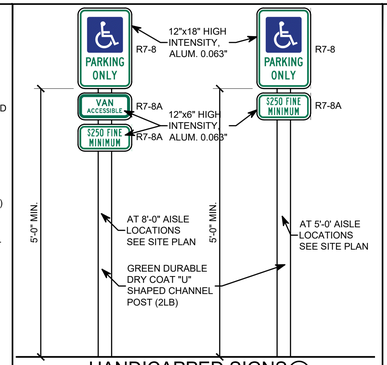

## CONC. SIDEWALK DETAIL 3

SCALE: 1"=1'-0"



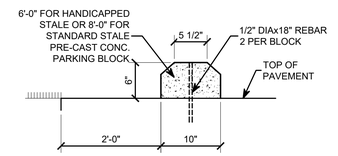

## HANDICAPPED PARKING 4

SCALE: 1/8"=1'-0"



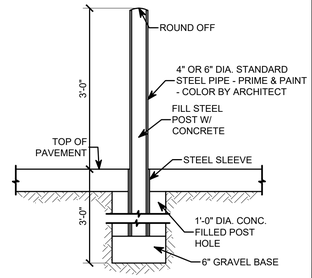

## HANDICAPPED SIGNS 5

SCALE: 3/4"=1'-0"



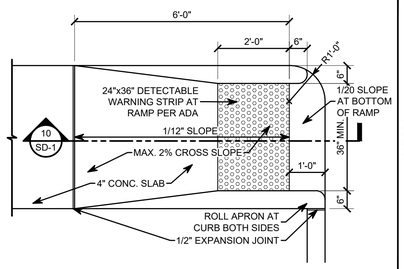

## CONCRETE PARKING BLOCK 6

SCALE: 1"=1'-0"



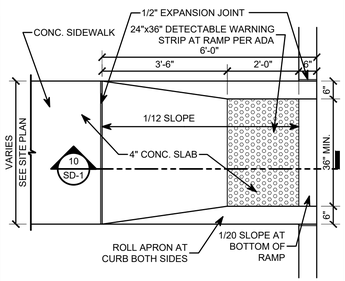

## BARRIER POST DETAIL 7

SCALE: 3/4"=1'-0"



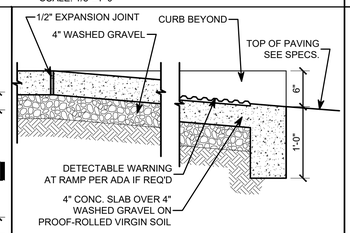

## CONCRETE RAMP PLAN 8

SCALE: 1/2" = 1'-0"



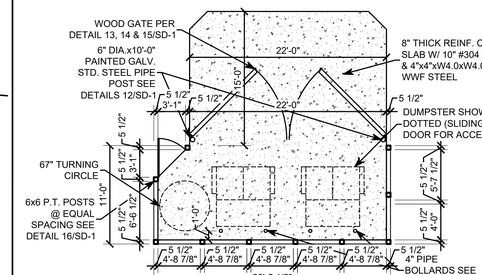

## CONCRETE RAMP PLAN 9

SCALE: 1/2"=1'-0"



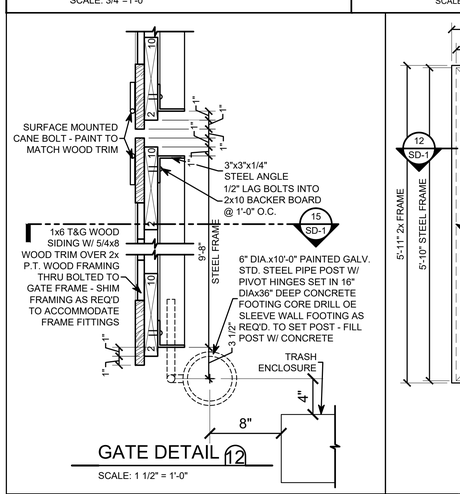

## CONC. RAMP DETAIL 10

SCALE: 1"=1'-0"



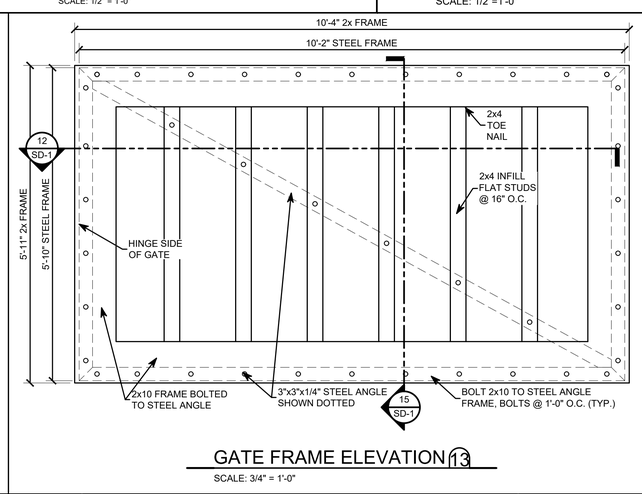

## TRASH ENCLOSURE PLAN 11

SCALE: 1/8" = 1'-0"



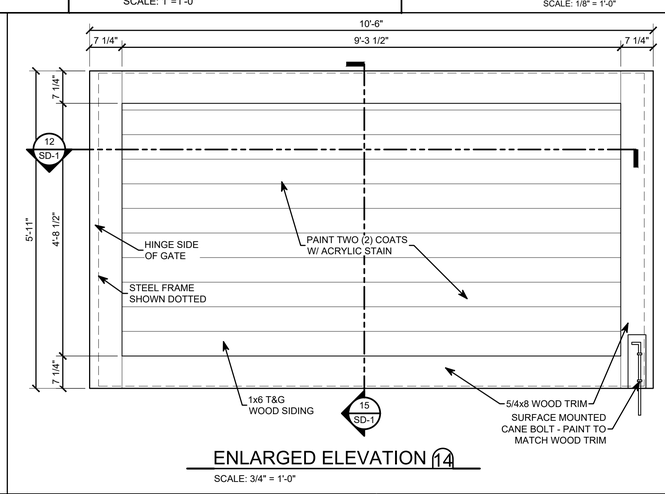

## GATE DETAIL 12

SCALE: 1 1/2" = 1'-0"



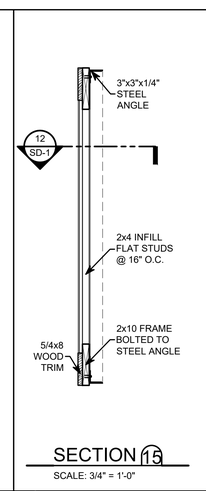

## GATE FRAME ELEVATION 13

SCALE: 3/4" = 1'-0"



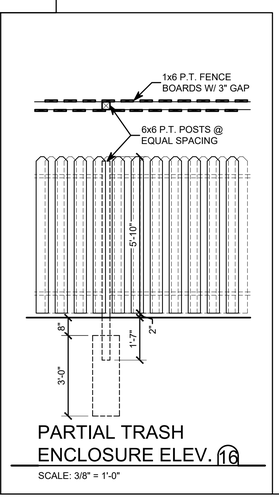

## ENLARGED ELEVATION 14

SCALE: 3/4" = 1'-0"




## SECTION 15

SCALE: 3/4" = 1'-0"




## PARTIAL TRASH ENCLOSURE ELEV. 16

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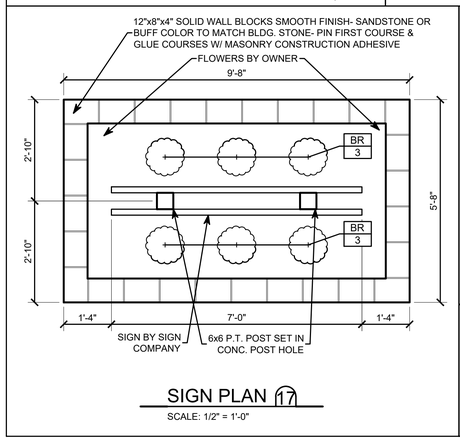
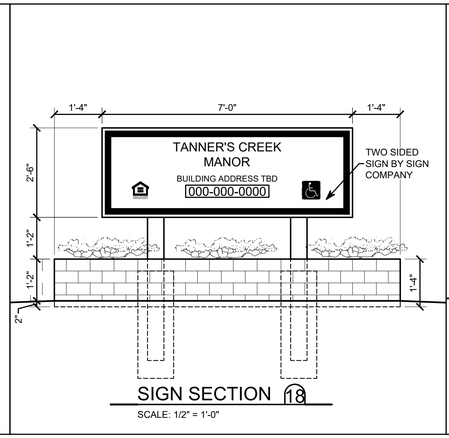


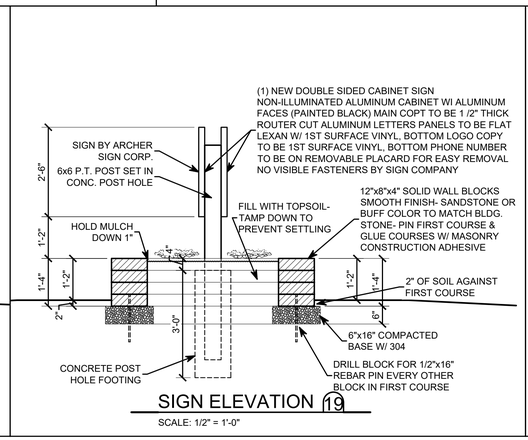

## SIGN PLAN 17

SCALE: 1/2" = 1'-0"



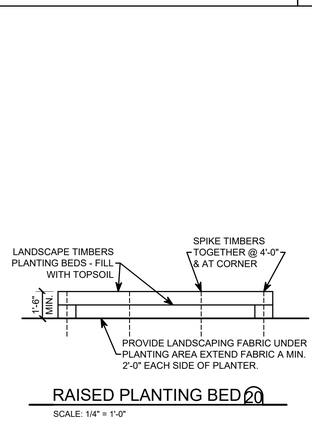

## SIGN SECTION 18

SCALE: 1/2" = 1'-0"



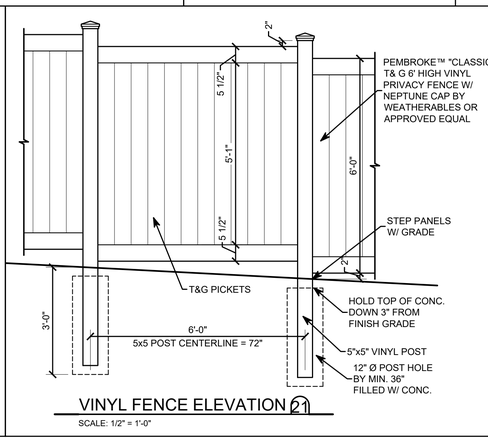

## SIGN ELEVATION 19

SCALE: 1/2" = 1'-0"




## RAISED PLANTING BED 20

SCALE: 1/4" = 1'-0"




## VINYL FENCE ELEVATION 21

SCALE: 1/2" = 1'-0"


**KONTOGIANNIS & ASSOCIATES**

ARCHITECTURE
PLANNING
DESIGN

400 SOUTH FIFTH ST
SUITE 400
COLUMBUS, OHIO
43215-5492

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PROJECT:

# TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

SITE DETAILS

DATE: 06/26/2026
REVISED:

GEORGE J. KONTOGIANNIS REGISTERED No. AR00034309 STATE OF INDIANA ARCHITECT

GEORGE J. KONTOGIANNIS, LICENSE #AR00034309
EXPIRATION DATE 12/31/2027


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- ☐ SUBMISSION SET 06/27/2025
- ☐ ZONING SET 05/07/2026
- ■ BID SET 06/26/2026
- ☐ PERMIT SET
- ☐ CONSTRUCTION SET

# SD-1


H:\Projects\Architects\Current\Tanner's Creek Manor - IN Tax Credit - Spire\AutoCAD\Site Plans\SD-1.dwg, 6/26/2026 2:03:39 PM, MH

Design No. P522

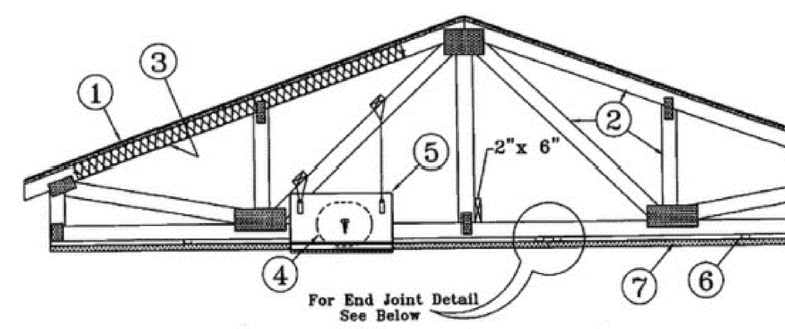
March 30, 2026

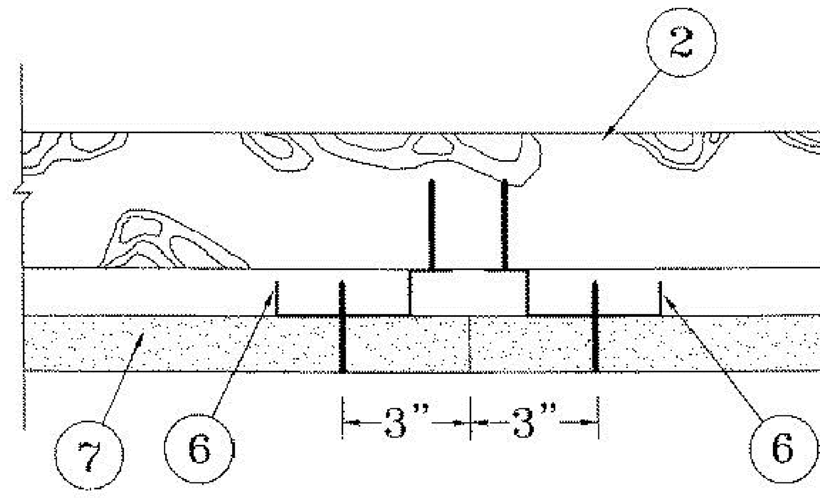
Unrestrained Assembly Rating -- 1 Hr

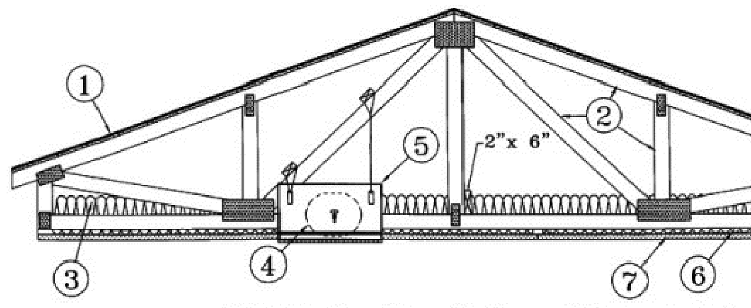
Finish Rating -- 25 Min (See Items 3 or 3A )

This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be used -- See Guide BXUV or BXUV7

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.




Alternate Insulation Placement

1. Roofing System* -- Any UL Class A, B or C Roofing System (TGFU) or Prepared Roof Covering (TFWZ) acceptable for use over nom 15/32 in. thick wood structural panels, min. grade "C-D" or "Sheathing". Nom 15/32 in. thick wood structural panels secured to trusses with No. 6d ringed shank nails spaced 12 in. OC along each truss. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails. Construction adhesive may be used with either the nails or staples.

2. Trusses -- Pitched or parallel chord wood trusses, spaced a max of 24 in. OC, fabricated from nom 2 by 4 lumber, with lumber oriented vertically or horizontally. Truss members secured together with min. 0.0356 in. thick galv steel plates. Plates have 5/16 in. long teeth projecting perpendicular to the plane of the plate. The teeth are in pairs facing each other (made by the same punch), forming a split tooth type plate. Each tooth has a chisel point on its outside edge. These points are diagonally opposite each other for each pair. The top half of each tooth has a twist for stiffness. The pairs are repeated on approximately 7/8 in. centers with four rows of teeth per inch of plate width. Minimum parallel chord truss depth shall be 18 in. Where pitched truss intersects with the interior face of the exterior walls, the min truss depth shall be 5-1/4 in. with a min roof slope of 3/12 and a min. average depth of 18 in.. Where the truss intersects with the interior face of the exterior walls, the min truss depth may be reduced to 3 in. if the batts and blankets ( Item 3) are used as shown in the above illustration (Alternate Insulation Placement) and are firmly packed against the intersection of the bottom chords and the plywood sheathing.

3. Batts and Blankets* -- (Optional) -- Required when Item 6B is used -- Glass fiber insulation, secured to the wood structural panels with staples spaced 12 in. OC or to the trusses with 0.090 in. diam galv steel wires spaced 12 in. OC. Any glass fiber or loose fill insulation bearing the UL Classification Marking as to Surface Burning Characteristics and/or Fire Resistance, having a min density of 0.5 pcf. As an option, the insulation may be fitted in the concealed space, draped over the resilient channel/gypsum board ceiling membrane when resilient channels and gypsum board attachment is modified as specified in Items 6 and 7. When Steel Framing Members (Item 6B) are used, max 3-1/2 in. thick insulation shall be draped over the furring channels (Item 6Ba) and gypsum board ceiling membrane, and friction-fitted between trusses and Steel Framing Members (Item 6Bd). The finished rating has only been determined when the insulation is secured to the decking.

3A. Fiber, Sprayed* -- As an alternate to Item 3 (not evaluated for use with Item 6B) -- Any thickness of spray-applied cellulose insulation material, having a min density of 0.5 $lb/ft^3$, applied with water, over the resilient channel/gypsum board ceiling membrane when resilient channels and gypsum board attachment is modified as specified in Items 6 and 7. Fiber, Sprayed is applied with moisture in accordance with the application instructions supplied with the product. The finish rating when Fiber Sprayed is used has not been determined. Alternate application method: The fiber is applied without water or adhesive in accordance with the application instructions supplied with a minimum density of 0.5 $lb/ft^3$ over the resilient channel/gypsum board ceiling membrane when resilient channels and gypsum board attachment is modified as specified in Items 6 and 7. Alternate application method: The fiber is applied without water or adhesive to a nominal density of 3.5 $lb/ft^3$ behind netting (Item 9) stapled to the rafters. The netting is stapled at both lower edges of the rafters creating a cavity to accept the cellulose fiber.

APPLEGATE GREENFIBER ACQUISITION LLC -- SANCTUARY for use with wet or dry application. Insulmax are to be used for dry application only.

3B. Foamed Plastic* -- (As an alternate to Item 3, Not Shown) -- Spray foam insulation applied directly to the underside of the underside of the roofing system (Item 1). Spray foam insulation installed to a maximum thickness of 10 in. at a nominal 0.5 $lb/ft^3$ density, while maintaining a minimum 8-1/2 in. clearance between the spray foam insulation and the gypsum board (Item 7). When spray foam insulation is used, resilient channels (Item 6) shall be installed maximum 12 in. OC, with channels adjacent to butt joints of gypsum board (Item 7) installed at 6 in. OC to allow for maximum 3 in. spacing off ends of the gypsum board joints. Gypsum board (Item 7) to be installed using 1-1/4 in. long Type S screws, spaced maximum 8 in. OC, and butted end joints shall be staggered min. 2 ft within the assembly, and occur midway between the continuous furring channels. If used with a fire damper (Items 5 and alternates) in the concealed space, minimum 1 in. clearance to be maintained between damper housing and spray foam insulation. Limited to resilient channels, Item 6 only, no Item 6 alternates.

Amrize Building Envelope LLC -- Enverge SucraSeal

3C. Cavity Insulation - Batts and Blankets* or Fiber, Sprayed* -- (As described above) in Items 3 and 3A -- (For Use with Item 7B, Not Shown) -- Min. 3-1/2 in thick with no limit on maximum thickness fitted in the concealed space, draped over the resilient channel (Item 6G)/gypsum board (Item 7B) ceiling membrane.

3D. Foamed Plastic* -- (As alternate to Item 3, Not Shown) -- Spray foam insulation applied directly to the underside of the roofing system (Item 1). Spray foam insulation installed to a maximum thickness of 10 in. at a nominal 0.5 $lb/ft^3$ or 2.0 $lb/ft^3$ density, depending on the product installed. When spray foam insulation is installed, resilient channels (Item 6) shall be installed maximum 12 in. OC, with channels adjacent to butt joints of gypsum board (Item 7) spaced maximum 3 in. away from gypsum butt joints. Gypsum board (Item 7) to be installed using minimum 1-1/4 in. long Type S screws, spaced maximum 8 in. OC, and butted end joints shall be staggered min. 2 ft within the assembly, and occur midway between the continuous furring channels. If used with a fire damper (Items 5 and alternates) in the concealed space, minimum 1 in. clearance to be maintained between damper housing and spray foam insulation. Limited to resilient channels, Item 6 only, no Item 6 alternates.

BASF CORP -- Enertite® G, Walltite® MAX, Walltite® v.5, Walltite® One, and Enertite® Max

3E. Foamed Plastic* -- (As an alternate to Item 3, Not Shown) -- Spray foam insulation applied directly to the underside of the underside of the roofing system (Item 1). Spray foam insulation installed to a maximum thickness of 17 in. at a nominal 0.5 $lb/ft^3$ density, while maintaining a minimum 1-1/2 in. clearance between the spray foam insulation and the gypsum board (Item 7). When spray foam insulation is used, resilient channels (Item 6) shall be installed maximum 12 in. OC, with channels adjacent to butt joints of gypsum board (Item 7) installed at 6 in. OC to allow for maximum 3 in. spacing off ends of the gypsum board joints. Gypsum board (Item 7) to be installed using 1-1/4 in. long Type S screws, spaced maximum 8 in. OC, and butted end joints shall be staggered min. 2 ft within the assembly, and occur midway between the continuous furring channels. If used with a fire damper (Items 5 and alternates) in the concealed space, no clearance is necessary between damper housing and spray foam insulation. Limited to resilient channels, Item 6 only, no Item 6 alternates.

Amrize Building Envelope LLC -- Enverge EasySeal .5, Enverge EasySeal Ultra, Enverge EZ-U

3F. Foamed Plastic* -- (As alternate to Item 3) -- Spray foam insulation applied directly to the underside of the roofing system (Item 1). Spray foam insulation installed to a maximum thickness of 11 in. at a nominal 0.5 $lb/ft^3$ - 2.5 $lb/ft^3$ density, while maintaining a minimum 7 in. clearance between the spray foam insulation and the gypsum board (Item 7). When spray foam insulation is installed, resilient channels (Item 6) shall be installed maximum 12 in. OC, with channels adjacent to butt joints of gypsum board spaced maximum 3 in. away from gypsum butt joints. Gypsum board to be installed using minimum 1-1/4 in. long Type S screws, spaced maximum 8 in. OC, and butted end joints shall be staggered min. 2 ft within the assembly, and occur midway between the continuous furring channels. If used with a fire damper (Items 5 and alternates) in the concealed space, no clearance is necessary between damper housing and spray foam insulation. Only for use with item 6 not evaluated for use with alternates to item 6.

CARLISLE SPRAY FOAM INSULATION -- Types SealTite Pro Closed Cell (CC), SealTite Pro Open Cell (OC), SealTite Pro OCX, SealTite Pro No Trim 21, SealTite Pro One Zero, SealTite PRO HFO, Foamsulate Closed Cell, Foamsulate OCX, Foamsulate 70, Foamsulate HFO, and Foamsulate HFO 2.0.

3G. Foamed Plastic* -- (As an alternate to Item 3, Not Shown) -- Spray foam insulation applied directly to the underside of the underside of the roofing system (Item 1). Spray foam insulation installed to a maximum thickness of 17 in. at a nominal 0.5 $lb/ft^3$ density, while maintaining a minimum 1-1/2 in. clearance between the spray foam insulation and the gypsum board (Item 7). When spray foam insulation is used, resilient channels (Item 6) shall be installed maximum 12 in. OC, with channels adjacent to butt joints of gypsum board (Item 7) installed at 6 in. OC to allow for maximum 3 in. spacing off ends of the gypsum board joints. Gypsum board (Item 7) to be installed using 1-1/4 in. long Type S screws, spaced maximum 8 in. OC, and butted end joints shall be staggered min. 2 ft within the assembly, and occur midway between the continuous furring channels. If used with a fire damper (Items 5 and alternates) in the concealed space, no clearance is necessary between damper housing and spray foam insulation. Limited to resilient channels, Item 6 only, no Item 6 alternates.

FIRE RATING FOR 1 HOUR ROOF/CEILING ASSEMBLY
U.L. DESIGN NO. P522

EVEREST SYSTEMS LLC -- Opticell 0.5

4. Air Duct* -- For use with Ceiling Dampers* - Any UL Class 0 or Class 1 flexible air duct installed in accordance with the instructions provided by the damper manufacturer.

5. Ceiling Damper* -- Max nom area, 324 sq in. Max square size, 18 in. by 18 in. rectangular sizes not to exceed 324 sq in. with a max width of 18 in. Max damper height is 14 in. Installed in accordance with manufacturers installation instructions provided with the damper. Max damper openings not to exceed 162 sq in. per 100 sq ft of ceiling area.

C&S AIR PRODUCTS -- Model RD-521

POTTORFF -- Model CFD-521

5A. Alternate Ceiling Damper* -- Max nom area, 196 sq in. Max square size, 14 in. by 14 in. Rectangular sizes not to exceed 196 sq in. with a max width of 26 in. Max overall damper height is 7 in. Installed in accordance with the manufacturers installation instructions provided with the damper. Max damper openings not to exceed 98 sq in. per 100 sq ft of ceiling area.

C&S AIR PRODUCTS -- Model RD-521-BT

POTTORFF -- Model CFD-521-BT.

5B. Alternate Ceiling Damper* -- Max nom area shall be 256 sq in. with the length not to exceed 24 in. and the width not to exceed 20 in. Max height of damper shall be 17 in. Aggregate damper openings shall not exceed 128 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturers installation instructions provided with the damper. A steel grille shall be installed in accordance with installation instructions.

C&S AIR PRODUCTS -- Model RD-521-IP, RD-521-NP

POTTORFF -- Models CFD-521-IP, CFD-521-NP

5C. Alternate Ceiling Damper* -- Ceiling damper & fan assembly. Max nom area shall be 75 sq in. with the length not to exceed 8-9/16 in. and the width not to exceed 8-3/4 in. Max height of damper shall be 9-7/8 in. Aggregate damper openings shall not exceed 38 sq in. per 100 sq ft of ceiling area. Damper shall be installed in combination with one of the fan models described in, and in accordance with, the manufacturers installation instructions provided with the damper. A plastic grille shall be installed in accordance with installation instructions.

DELTA ELECTRONICS INC -- Models CRD2, GBR-CRD, ITG-CRD

5D. Alternate Ceiling Damper* -- Ceiling damper & fan. Max nom area shall be 75 sq in. with the length not to exceed 9-1/4 in. and the width not to exceed 9-3/4 in. Max height of damper shall be 9-7/8 in. Aggregate damper openings shall not exceed 45 sq in. per 100 sq ft of ceiling area. Damper shall be installed in combination with one of the fan models described in, and in accordance with, the manufacturer's installation instructions provided with the damper. A plastic grille shall be installed in accordance with installation instructions.

DELTA ELECTRONICS INC -- Model SIG-CRD

5E. Alternate Ceiling Damper* -- Max nom area shall be 144 sq in. with the length not to exceed 14 in. and the width not to exceed 12 in. Max height of damper shall be 17-7/8 in. Aggregate damper openings shall not exceed 74 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturers installation instructions provided with the damper. A steel grille shall be installed in accordance with installation instructions.

C&S AIR PRODUCTS -- Model RD-521-90, RD-521-NP90

POTTORFF -- Models CFD-521-90, CFD-521-90NP

5F. Alternate Ceiling Damper* -- Ceiling damper & fan assembly. Max nom area shall be 131 sq in. with the length not to exceed 11-1/16 in. and the width not to exceed 11-7/8 in. Aggregate damper openings shall not exceed 66 sq in. per 100 sq ft of ceiling area. Damper shall be installed in combination with one of the fan models described in, and in accordance with, the manufacturer's installation instructions provided with the damper. A plastic grille shall be installed in accordance with installation instructions.

DELTA ELECTRONICS INC -- Model SMT-CRD

5G. Alternate Ceiling Damper* -- Ceiling damper & fan assembly. Max nom area shall be 103 sq in. with the length not to exceed 10-1/8 in. and the width not to exceed 10-1/8 in. Aggregate damper openings shall not exceed 52 sq in. per 100 sq ft of ceiling area. Damper shall be installed in combination with one of the fan models described in, and in accordance with, the manufacturer's installation instructions provided with the damper. A plastic grille shall be installed in accordance with installation instructions.

PANASONIC CORPORATION, PANASONIC CORPORATION OF NORTH AMERICA -- Model PC-RD05C5

5H. Alternate Ceiling Damper* -- Ceiling damper & fan assembly. Max nom area shall be 113 sq in. with the length not to exceed 10-1/8 in. and the width not to exceed 11-1/8 in. Aggregate damper openings shall not exceed 57 sq in. per 100 sq ft of ceiling area. Damper shall be installed in combination with one of the fan models described in, and in accordance with, the manufacturer's installation instructions provided with the damper. A plastic grille shall be installed in accordance with installation instructions.

BROAN-NUTONE L L C -- Model RDFUWT

5I. Alternate Ceiling Damper* -- Ceiling damper & fan. Max nom area shall be 79 sq in. with the length not to exceed 10 in. and the width not to exceed 7-15/16 in. Aggregate damper openings shall not exceed 40 sq in. per 100 sq ft of ceiling area. Damper shall be installed in combination with one of the fan models described in, and in accordance with, the manufacturer's installation instructions provided with the damper. A metallic grille shall be installed in accordance with installation instructions.

BROAN-NUTONE L L C -- Models RDJ1 and RDH

5J. Alternate Ceiling Damper* -- Ceiling damper & fan assembly. Max nom area shall be 87 sq in. with the length not to exceed 9 in. and the width not to exceed 9-11/16 in. Aggregate damper openings shall not exceed 44 sq in. per 100 sq ft of ceiling area. Damper shall be installed in combination with one of the fan models described in, and in accordance with, the manufacturer's installation instructions provided with the damper. A plastic grille shall be installed in accordance with installation instructions.

BROAN-NUTONE L L C -- Model RDMWT

5K. Alternate Ceiling Damper* -- Ceiling damper & fan assembly. Max nom area shall be 87 sq in. with the length not to exceed 9 in. and the width not to exceed 9-11/16 in. Aggregate damper openings shall not exceed 44 sq in. per 100 sq ft of ceiling area. Damper shall be installed in combination with one of the fan models described in, and in accordance with, the manufacturer's installation instructions provided with the damper. A plastic grille shall be installed in accordance with installation instructions.

BROAN-NUTONE L L C -- Model RDMWT2

6. Furring Channels -- Resilient channels formed of 25 MSG thick galv steel. Installed perpendicular to the trusses (Item 2), spaced a max of 16 in. OC when no insulation (Item 3 or 3A) is fitted in the concealed spaced, or a max of 12 in. OC when insulation (Item 3 or 3A) is fitted in the concealed space, draped over the resilient channel/gypsum board ceiling membrane, or when insulation (Item 3B, 3D or 3E) is applied to the underside of the roofing system (Item 1). Two courses of resilient channel positioned 6 in. OC at wallboard butt-joints (3 in. from each end of wallboard). Channels oriented opposite at wallboard butt-joints. Channel splices overlapped 4 in. beneath wood trusses. Channels secured to each truss with 1-1/4 in. long Type S screws.

6A. Steel Framing Members* -- (Not Shown) -- As an alternate to Item 6, furring channels and Steel Framing Members as described below:

a. Furring Channels -- Formed of No. 25 MSG galv steel. 2-9/16 in. or 2-23/32 in. wide by 7/8 in. deep, spaced 16 in. OC perpendicular to trusses when no insulation (Items 3 or 3A) is fitted in the concealed space or 12 in. OC when insulation (Items 3 or 3A) is fitted in the concealed space, draped over the furring channel/gypsum board ceiling membrane or 24 in. OC when insulation (Items 3 or 3A) is fitted in the concealed space, draped over the furring channel/gypsum board ceiling membrane and a second layer of gypsum board is attached as described in Item 7 for steel framing members. Channels secured to trusses as described in Item 6Ab. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap.

b. Steel Framing Members -- Used to attach furring channels (Item a) to trusses (Item 2). Clips spaced 48 in. OC. RSIC-1 and RSIC-1 (2.75) clips secured to alternating trusses with No. 8 by 2-1/2 in. coarse drywall screw through the center grommet. RSIC-V and RSIC-V (2.75) clips secured to alternating trusses with No. 8 by 1-1/2 in. coarse drywall screw through the center hole. Furring channels are friction fitted into clips. RSIC-1 and RSIC-V clips for use with 2-9/16 in. wide furring channels. RSIC-1 (2.75) and RSIC-V (2.75) clips for use with 2-23/32 in. wide furring channels. Adjoining channels are overlapped as described in Item 6Aa. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping No. 6 framing screws, min. 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Additional clips required to hold furring channel that supports the gypsum board butt joints, as described in Item 7.

PAC INTERNATIONAL L L C -- Types RSIC-1, RSIC-V, RSIC-1 (2.75), RSIC-V (2.75).

6B. Steel Framing Members* -- (Not Shown) -- As an alternate to Items 6 and 6A.

a. Furring Channels -- Hat-shaped furring channels, 7/8 in. deep by 2-5/8 in. wide at the base and 1-1/4 in. wide at the face, formed from No. 25 ga. galv steel, spaced max 16 in. OC perpendicular to trusses and Cold Rolled Channels (Item 6Bb). Furring channels secured to Cold Rolled Channels at every intersection with a 1/2 in. pan head self-drilling screw through each furring channel leg. Ends of adjoining channels overlapped 4 in. and tied together with two double strand No. 18 SWG galv steel wire ties, one at each end of overlap. Supplemental furring channels at base layer and outer layer gypsum board butt joints are not required. Batts and Blankets draped over furring channels as described in Item 3. Two layers of gypsum board attached to furring channels as described in Item 7.

b. Cold Rolled Channels -- 1-1/2 in. by 1/2 in., formed from No. 16 ga. galv steel, positioned vertically and parallel to trusses, friction-fitted into the channel caddy on the Steel Framing Members (Item 6Bd). Adjoining lengths of cold rolled channels lapped min. 6 in. and wire-tied together with two double strand 18 SWG galv steel wire ties, one at each end of overlap.

c. Blocking -- Where truss design does not permit direct, full contact of the hanger bracket, a piece of nominal 2 by 4 in. lumber (blocking), min. 6 in. long to permit full contact of the hanger bracket, to be secured vertically to the side of the truss (Item 2) at the top and bottom of the blocking at each Steel Framing Member (Item 6Bd) location.

d. Steel Framing Members* -- Hangers spaced 48 in. OC. max along truss, and secured to the Blocking (Item 6Bc) on alternating trusses with a single 5/16 in. by 2 in. hex head lag bolt or four #6 1-1/4 in. drywall screws through mounting hole(s) on the hanger bracket. The two 1/4 in. long steel teeth on the hanger are embedded in the side of the blocking. Hanger positioned on blocking and leveling bolt height adjusted such that furring channels are flush with bottom of trusses before gypsum board installation. Spring gauge of hanger chosen per manufacturer's instructions.

KINETICS NOISE CONTROL INC -- Type ICW.

6C. Steel Framing Members* -- (Not Shown) -- As an alternate to Items 6, 6A and 6B.

a. Furring Channels -- Formed of No. 25 MSG galv steel, 2-3/8 in. wide by 7/8 in. deep installed perpendicular to wood structural members. Channels spaced a max of 16 in. OC when no insulation (Item 3 or 3A) is fitted in the concealed space or a max of 12 in. OC when insulation (Item 3 or 3A) is fitted in the concealed space. Channels secured to trusses as described in Item 6Cb. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 AWG galvanized steel wire near each end of overlap.

b. Steel Framing Members* -- Used to attach furring channels (Item 6Ca) to trusses (Item 2). Clips secured to the bottom chord of each truss (48 in. OC) with one No. 8 by 2-1/2 in. long coarse drywall screw through center grommet. Furring channels are friction fitted into clips. Adjoining channels are overlapped as described in Item 6Ca. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping No. 6 framing screws, min 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Additional clips required to hold furring channel that supports the gypsum board butt joints, as described in Item 7.

PLITEQ INC -- Type Genie Clip

6D. Steel Framing Members* -- (Not Shown) -- As an alternate to Items 6, 6A, 6B and 6C.

a. Main runners -- Installed perpendicular to trusses -- Nom 10 or 12 ft long, 15/16 in. or 1-1/2 in. wide face, spaced 4 ft OC. Main runners hung a min of 2 in. from bottom chord of trusses with 12 SWG galv steel wire. Wires located a max of 48 in. OC.

b. Cross tees or channels -- Nom 4 ft long, 15/16 in. or 1-1/2 in. wide face or cross channels, nom 4 ft long, 1-1/2 wide face, installed perpendicular to the main runners, spaced 16 in. OC. Additional cross tees or channels used at 8 in. from each side of butted gypsum board end joints. The cross tees or channels may be riveted or screw-attached to the wall angle or channel to facilitate the ceiling installation.

c. Wall angles or channels -- Used to support steel framing member ends and for screw-attachment of the gypsum wallboard -- Min 0.016 in. thick painted or galvanized steel angle with 1 in. legs or min. 0.016 in. thick painted or galvanized steel channel with a 1 by 1-1/2 by 1 in. profile, attached to walls at perimeter of ceiling with fasteners 16 in. OC.

CGC INC -- Type DGL or RX

USG INTERIORS LLC -- Type DGL or RX

6E. Alternate Steel Framing Members* -- (Not Shown) -- As an alternate to items 6, 6A, 6B, and 6C, furring channels and Steel Framing Members as described below.

a. Furring Channels -- Formed of No. 25 MSG galv steel, 2-5/8 in. wide by 7/8 in deep, spaced 16 in OC, perpendicular to trusses. When insulation, Items 3 or 3A is used, the furring channel spacing shall be reduced to 12 in. OC. Channels secured to joists as described in Item b.

b. Steel Framing Members* -- Used to attach furring channels (Item a) to the wood trusses (Item 2). Clips spaced at 48" OC and secured to the bottom of the trusses with one 2 in. Coarse Drywall Screw with 1 in. diam washer through the center hole. Furring channels are then friction fitted into clips. Ends of channels are overlapped 6" and tied together with double strand of No. 18 AWG galvanized steel wire. Additional clips are required to hold the Gypsum Butt joints as described in Item 7.

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U.L. DESIGN NO. P522

STUDCO BUILDING SYSTEMS -- RESILMOUNT Sound Isolation Clips - Type A237 or A237R

6F. Steel Framing Members* -- (Not Shown) -- As an alternate to Items 6 through 6E- Not for use with Items 3 or 3A. Main runners nom 12 ft long, spaced 72 in. OC. Main runners suspended by min 12 SWG galv steel hanger wires spaced 48 in. OC. Cross tees, nom 6 ft long, installed perpendicular to main runners and spaced 24 in. OC. Additional 6 ft long cross tees required at each gypsum board end joint with butted gypsum board end joints centered between cross tees spaced 8 in. OC. The main runners and cross tees may be riveted or screw attached to the wall angle or channel to facilitate the ceiling installation.

USG INTERIORS LLC -- Type DGL or RX

6G. Resilient Channels -- For Use With Item 7B - Formed from min 25 MSG galv steel installed perpendicular to trusses and spaced 16 in. OC. Channels secured to each truss with 1-5/8 in. long Type S bugle head steel screws. Channels overlapped 4 in. at splices. Two channels, spaced 6 in. OC, oriented opposite each gypsum panel end joint. Additional channels shall extend min 6 in. beyond each side edge of panel. Insulation, Item 3C is applied over the resilient channel/gypsum panel ceiling membrane.

6H. Alternate Steel Framing Members* -- (Not Shown) -- As an alternate to items 6 through 6G, furring channels and Steel Framing Members as described below.

a. Furring Channels -- Formed of No. 25 MSG galv steel, 2-1/2 in. wide by 7/8 in deep, spaced 16 in OC, perpendicular to trusses. When insulation, Items 3 or 3A is used, the furring channel spacing shall be reduced to 12 in. OC. Channels secured to joists as described in Item b.

b. Steel Framing Members* -- Used to attach furring channels (Item a) to the wood trusses (Item 2). Clips spaced at 48" OC and secured to the bottom of the trusses with one 2-1/2 in. Coarse Drywall Screw with 1 in. diam washer through the center hole. Furring channels are then friction fitted into clips. Ends of channels are overlapped 6" and tied together with double strand of No. 18 AWG galvanized steel wire. Additional clips are required to hold the Gypsum Butt joints as described in Item 7.

REGUPOL AMERICA -- Type SonusClip

7. Gypsum Board* -- One layer of nom 5/8 in. thick by 48 in. wide boards, installed with long dimension parallel to trusses. Attached to the resilient channels using 1 in. long Type S bugle-head screws. Screws spaced a max of 12 in. OC along butted end-joints and in the field when no insulation (Item 3 or 3A) is fitted in the concealed spaced, or a max of 8 in. OC along butted end-joints and in the field when insulation (Item 3 or 3A ) is fitted in the concealed space, draped over the resilient channel/gypsum board ceiling membrane. When insulation (Item 3B, 3D or 3E) is installed in the concealed space, spray-applied to the underside of the roofing system (Item 1), screws are spaced a max of 8 in. OC along resilient channels, fasteners are increased in length to 1-1/4 in, and gypsum board butt joints shall be staggered min. 2 ft within the assembly, and occur between the main furring channels.

When Steel Framing Members* (Item 6A or 6C) are used, sheets installed with long dimension perpendicular to furring channels and side joints of sheet located beneath trusses. Gypsum board screws are driven through channel spaced 12 in. OC in the field when no insulation (Item 3 or 3A) is fitted in the concealed space, or 8 in. OC in the field when insulation (Item 3 or 3A) is fitted in the concealed space, draped over the furring channel/gypsum board ceiling membrane. Gypsum board butt joints shall be staggered min. 2 ft within the assembly, and occur between the main furring channels. At the gypsum board butt joints, each end of the gypsum board shall be supported by a single length of furring channel equal to the width of the wallboard plus 6 in. on each end. The furring channels shall be spaced approximately 3-1/2 in. OC, and be attached to the trusses with one clip at each end of the channel. Screw spacing along the butt joint to attach the gypsum board to the furring channels shall be 8 in. OC. Second (outer) layer of gypsum board required when furring channels (Item 6A, a) are spaced 24 in. OC and insulation is fitted in the concealed space, draped over the furring channel/gypsum board ceiling membrane. Outer layer of gypsum board attached to the furring channels using 1-5/8 in. long Type S bugle-head screws spaced 8 in. OC at butted joints and 12 in. OC in the field. Butted end joints of outer layer to be offset a minimum of 8 in. from base layer end joints. Butted side joints of outer layer to be offset minimum 18 in. from butted side joints of base layer.

When Steel Framing Members (Item 6B) are used, two layers of nom 5/8 in. thick, 4 ft wide gypsum board are installed with long dimensions perpendicular to furring channels (Item 6Ba). Base layer attached to the furring channels using 1 in. long Type S bugle head steel screws spaced 8 in. OC along butted end joints and 12 in. OC in the field of the board. Butted end joints centered on the continuous furring channels. Butted base layer end joints to be offset a min of 16 in. in adjacent courses. Outer layer attached to the furring channels using 1-5/8 in. long Type S bugle head steel screws spaced 8 in. OC at butted end joints and 12 in. OC in the field. Butted end joints centered on the continuous furring channels and offset a min of 16 in. from butted end joints of base layer. Butted side joints of outer layer to be offset min 16 in. from butted side joints of base layer.

When Steel Framing Members (Item 6C) are used, one layer of nom 5/8 in. thick, 4 ft wide gypsum board is installed with long dimensions perpendicular to furring channels. Gypsum board secured to furring channels with nom 1 in. long Type S bugle-head steel screws spaced 8 in. OC in the field of the board. Gypsum board butted end joints shall be staggered minimum 72 in. At the gypsum board butt joints, each end of each gypsum board shall be supported by a single length of furring channel equal to the width of the gypsum board plus 3 in. on each end, spaced approximately 2 in. in from joint. Screw spacing along the gypsum board butt joint shall be 8 in. OC. Butt joint furring channels shall be attached with a RESILMOUNT Sound Isolation Clip secured to underside of every truss that is located over the butt joint. Over all Gypsum Board side joints, approximately 20 in. lengths of furring channel shall be installed parallel to trusses (Item 2) between main furring channels. Side joint furring channels shall be attached to underside of the joist with RESILMOUNT Sound Isolation Clips - located approximately 2 in. from each end of the approximate 20 in. length of channel. Both Gypsum Boards at side joints fastened into channel with screws spaced 8 in. OC, approximately 1/2 in. from joint edge.

When Steel Framing Members (Item 6E) are used, one layer of nom 5/8 in. thick, 4 ft wide gypsum board is installed with long dimensions perpendicular to furring channels. Gypsum board secured to furring channels with nom 1 in. long Type S bugle-head steel screws spaced 8 in. OC in the field of the board. Gypsum board butted end joints shall be staggered minimum 48 in. and centered over main furring channels. At the gypsum board butt joints, each end of each gypsum board shall be supported by a single length of furring channel equal to the width of the gypsum board plus 3 in. on each end. The two support furring channels shall be spaced approximately 3 in. in from end joint. Screw spacing along the gypsum board butt joint and along both additional channels shall be 8 in. OC. Additional screws shall be placed in the adjacent section of gypsum board into the aforementioned 3 in. extension of the extra butt joint channels as well as into the main channel that runs between. Butt joint furring channels shall be attached with one RESILMOUNT Sound Isolation Clip at each end of the channel.

When alternate Steel Framing Members* (Item 6F) are used, one layer of nom 5/8 in. thick, 4 ft wide gypsum board sheets installed with long dimension (side joints) perpendicular to the 6 ft long cross tees with the end joints staggered min 4 ft and centered between cross tees which are spaced 8 in. OC. Gypsum board side joints may occur beneath or between main runners. Prior to installation of the gypsum board sheets, backer strips consisting of nom 7-3/4 in. wide pieces of gypsum board are to be laid atop the cross tee flanges and centered over each butted end joint location. The backer strips are to be secured to the flanges of the cross tees at opposite corners of the backer strip with hold down clips to prevent the backer strips from being uplifted during screw-attachment of the gypsum board sheets. Gypsum board fastened to cross tees with 1 in. drywall screws spaced 1 in. and 4 in. from the side joints and max 8 in. OC in the field of the board. The butted end joints are to be secured to the backer strip with No. 10 by 1-1/2 in. long Type G laminating screws located 1 in. from each side of the butted end joint and spaced 1 in. and 4 in. from the side joints and max 8 in. OC in the field of the board.

When Steel Framing Members (Item 6H) are used, one layer of nom 5/8 in. thick, 4 ft wide gypsum board is installed with long dimensions perpendicular to furring channels. Gypsum board secured to furring channels with nom 1 in. long Type S bugle-head steel screws spaced 8 in. OC in the field of the board. Gypsum board butted end joints shall be staggered minimum 48 in. and centered over main furring channels. At the gypsum board butt joints, an additional single length of furring channel shall be installed and be spaced approximately 3 in. from the butt joint (6 in. from the continuous furring channels) to support the floating end of the gypsum board. Each of these shorter sections of furring channel shall extend one truss beyond the width of the gypsum panel and be attached to the adjacent trusses with one SonusClip at every truss involved with the butt joint.

CGC INC -- Types C, IP-X2, IPC-AR

UNITED STATES GYPSUM CO -- Types C, IP-X2, IPC-AR

USG BORAL DRYWALL SFZ LLC -- Type C

USG MEXICO S A DE C V -- Types C, IP-X2, IPC-AR

7A. Gypsum Board* -- For use with Steel Framing Members (Item 6D) when Batts and Blankets* (Item 3) are not used - One layer of nom 5/8 in. thick by 48 in. wide boards, installed with long dimension parallel to the main runners. Gypsum board fastened to each cross tee or channel with five wallboard screws, with one screw located at the midspan of the cross tee or channel, one screw located 12 in. from and on each side of the cross tee or channel mid span and one screw located 1-1/2 in. from each gypsum board side joint. Except at wallboard end joints, wallboard screws shall be located on alternating sides of cross tee flange. At gypsum board end joints, gypsum board screws shall be located 1/2 in. from the joint. Gypsum board fastened to main runners with wallboard screws 1/2 in. from side joints, midway between intersections with cross tees or channels (16 in. OC). End joints of adjacent gypsum board sheets shall be staggered not less than 32 in. Gypsum board sheets screw attached to leg of wall angle with wallboard screws spaced 12 in. OC. Joints treated as described in Item 7. For use with Steel Framing Members* (Item 6D) when Batts and Blankets* (Item 3) are used - Ratings limited to 1 Hour - 5/8 in. thick, 4 ft wide; installed with long dimension perpendicular to cross tees with side joints centered along main runners and end joints centered along cross tees. Fastened to cross tees with 1 in. long steel gypsum board screws spaced 8 in. OC in the field and 8 in. OC along end joints. Fastened to main runners with 1 in. long gypsum board screws spaced midway between cross tees. Screws along sides and ends of boards spaced 3/8 to 1/2 in. from board edge. End joints of the sheets shall be staggered with spacing between joints on adjacent boards not less than 4 ft OC.

CGC INC -- Type C or IP-X2

UNITED STATES GYPSUM CO -- Type C or IP-X2

USG BORAL DRYWALL SFZ LLC -- Type C

USG MEXICO S A DE C V -- Type C or IP-X2

7B. Gypsum Board* -- For use with Items 3C and 6G. Nom 5/8 in. thick, 48 in. wide gypsum panels installed with long dimension perpendicular to resilient channels. Gypsum panels secured with 1 in. long Type S bugle head steel screws spaced 8 in. OC and located a min of 1/2 in. from side joints and 3 in. from the end joints. Finish Rating with this ceiling system is 20 min.

CGC INC -- Type ULIX

UNITED STATES GYPSUM CO -- Type ULIX

8. Finishing System -- (Not Shown) -- Vinyl, dry or premixed joint compound, applied in two coats to joints and screw-heads; paper tape, 2 in. wide, embedded in first layer of compound over all joints. As an alternate, nom 3/32 in. thick veneer plaster may be applied to the entire surface of gypsum board. Alternate Ceiling Membrane -- Not Shown.

9. Netting -- Fibrous, woven netting material fastened to underside of each joist with staples, with side joints overlapped.

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

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FIRE RATING FOR 1 HOUR ROOF/CEILING ASSEMBLY
U.L. DESIGN NO. P522

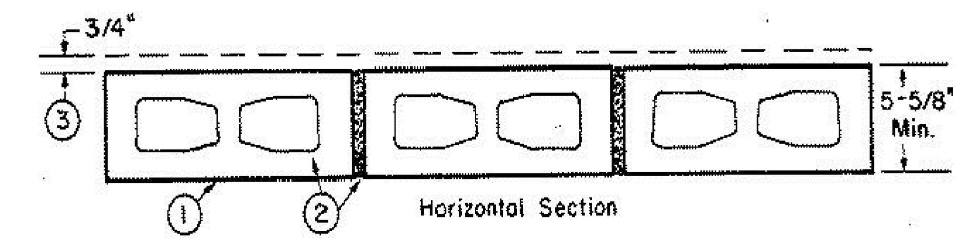
Design No. U906
January 14, 2026

Bearing Wall Rating -- 2 HR.

Nonbearing Wall Rating -- 2 HR.

This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be used -- See Guide BXUV or BXUV7

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.




1. Concrete Blocks* -- Nominal 6 by 8 by 16 in, hollow or solid. Various designs. Classification (2 hr).

See Concrete Blocks category for list of eligible manufacturers.

ANCHOR CONCRETE PRODUCTS INC

GAGNE & SON CONCRETE BLOCK INC

GLENWOOD MASONRY PRODUCTS

Allowable compressive stress of 57% of max allowable compressive stress in accordance with the empirical design method.

OLDCASTLE APG SOUTH INC, DBA ADAMS PRODUCTS

WESTBROOK CONCRETE BLOCK CO INC

Allowable compressive stress of 75.6% of max allowable compressive stress in accordance with the empirical design method.

2. Mortar -- Blocks laid in full bed of mortar, nom. 3/8 in. thick, of not less than 2-1/4 and not more than 3-1/2 parts of clean sharp sand to 1 part Portland cement (proportioned by volume) and not more than 50 percent hydrated lime (by cement volume). Vertical joints staggered.

3. Portland Cement Stucco or Gypsum Plaster -- Add 1/2 hr to Classification if used. Attached to concrete blocks (Item 1).

4. Foamed Plastic* -- (Optional-Not Shown) -- 1-1/2 in. thick max, 4 ft wide sheathing attached to concrete blocks (Item 1).

ATLAS ROOFING CORP -- EnergyShield Pro Wall Insulation, EnergyShield Pro 2 Wall Insulation, EnergyShield CGF Pro, EnergyShield Ply Pro, EnergyShield® CGF, EnergyShield® PanelCast, EnergyShield® and "EnergyShield® XR

DUPONT DE NEMOURS, INC. -- Types Thermax Sheathing, Thermax Light Duty Insulation, Thermax Heavy Duty Insulation, Thermax Metal Building Board, Thermax White Finish Insulation, Thermax ci Exterior Insulation, Thermax XARMOR ci Exterior Insulation, Thermax IH Insulation, Thermax Plus Liner Panel, Thermax Heavy Duty Plus (HDP), TUFF-R™ ci Insulation, Thermax Butler Stylwall Insulation Board and Thermax Morton Heavy Duty Insulation Board

Amrize Building Envelope LLC -- "Enverge™ CI Foil Exterior Wall Insulation" and "Enverge™ CI Glass Exterior Wall Insulation"

HUNTER PANELS, A DIVISION OF CARLISLE CONSTRUCTION MATERIALS, LLC -- Types "Xci-Class A", "Xci 286", "Xci Foil (Class A)"

RMAX, A BUSINESS UNIT OF SIKA CORPORATION -- Types "TSX-8500", "ECOMAXci FR", "TSX-8510", "ECOMAX xi FR White", "ECOMAXci", "ECOMAXci FR Air Barrier", "Thermasheath-XP", "Thermasheath", "Durasheath"

JOHNS MANVILLE -- Type "AP Foil-Faced Foam Sheathing"

4A. Building Units* -- As an alternate to Item 4, min. 1-in thick polyisocyanurate composite foamed plastic insulation boards, nom. 48 by 48 or 96 in.

ATLAS ROOFING CORP -- EnergyShield® Ply

RMAX, A BUSINESS UNIT OF SIKA CORPORATION -- "Thermasheath-SI", "ECOBASEci", "ThermaBase-CI", "ECOMAXci FR Ply", "ECOMAXci Ply"

4B. Foamed Plastic* -- (Optional -- Not Shown) -- As an alternate to Item 4 - Expanded polystyrene insulation installed at a maximum nominal density of 2.0 $lb/ft^3$ attached to concrete blocks (Item 1).

BASF CORP STYRENIC FOAMS DIV -- Neopor® GPS and NeoTherm GPS

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

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FIRE RATING FOR 2 HOUR BEARING WALL RATING
U.L. DESIGN NO. U906

KONTOGIANNIS
& ASSOCIATES

ARCHITECTURE
PLANNING
DESIGN

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43215-5492

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PROJECT:

TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

FIRE RESISTANCE RATINGS

DATE: 06/26/2026
REVISED:

GEORGE J. KONTOGIANNIS REGISTERED No. AR00034309 STATE OF INDIANA ARCHITECT

GEORGE J. KONTOGIANNIS, LICENSE #AR00034309
EXPIRATION DATE 12/31/2027

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- [ ] SUBMISSION SET 06/27/2025
- [ ] ZONING SET 05/07/2026
- [x] BID SET 06/26/2026
- [ ] PERMIT SET
- [ ] CONSTRUCTION SET

FR-1

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Design No. U305

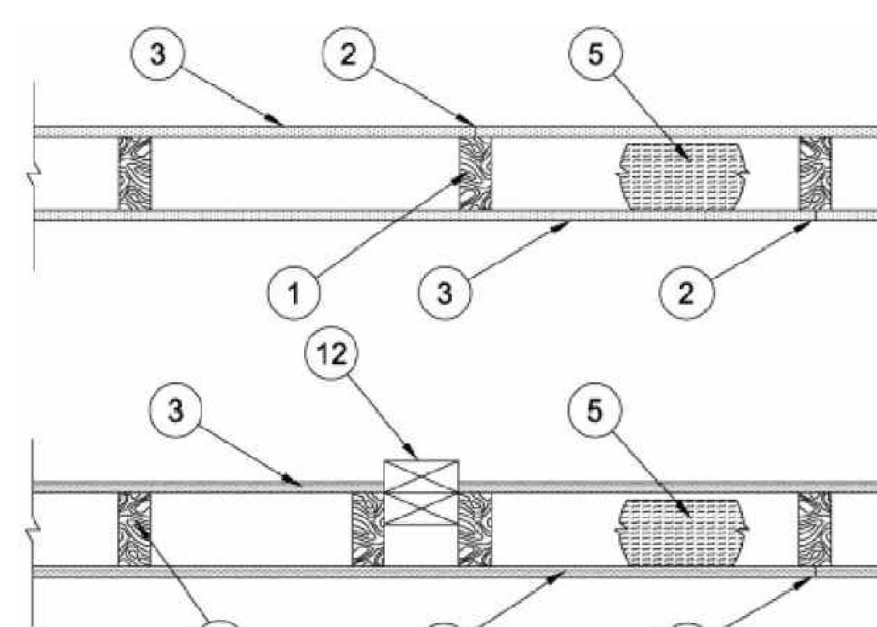
March 30, 2026

Bearing Wall Rating -- 1 Hr

Finish Rating -- See Items 3, 3A, 3D, 3E, 3F, 3G, 3H, 3J and 3L.

STC Rating - 56 (See Item 9)

This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be used -- See Guide BXUV or BXUV7




* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

1. Wood Studs -- Nom 2 by 4 in. spaced 16 in. OC max, effectively firestopped.

2. Joints and Nail-Heads -- Joints covered with joint compound and paper tape. Joint compound and paper tape may be omitted when square edge boards are used. As an alternate, nom 3/32 in. thick gypsum veneer plaster may be applied to the entire surface of Classified veneer baseboard with the joints reinforced with paper tape. Nailheads exposed or covered with joint compound.

3. Gypsum Board* -- 5/8 in. thick paper or vinyl surfaced, with beveled, square, or tapered edges, applied either horizontally or vertically. Gypsum panels nailed 7 in. OC with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 15/64 in. diam heads. When used in widths other than 48 in., gypsum panels are to be installed horizontally. For an alternate method of attachment of gypsum panels, refer to Items 6 through 6F, Steel Framing Members*.

When Items 6, 6B, 6C, 6D, 6E, 6F, 6G, or 6H Steel Framing Members*, are used, gypsum panels attached to furring channels with 1 in. long Type S bugle-head steel screws spaced 12 in. OC.

When Item 6A, Steel Framing Members*, is used, two layers of gypsum panels attached to furring channels. Base layer attached to furring channels with 1 in. long Type S bugle-head steel screws spaced 12 in. OC. Face layer attached to furring channels with 1-5/8 in. long Type S bugle-head steel screws spaced 12 in. OC. All joints in face layers staggered with joints in base layers. One layer of gypsum board attached to opposite side of wood stud without furring channels as described in Item 3.

When Item 7, resilient channels are used, 5/8 in. thick, 4 ft wide gypsum panels applied vertically. Screw attached furring channels with 1 in. long, self-drilling, self-tapping Type S or S-12 steel screws spaced 8 in. OC, vertical joints located midway between studs.

AMERICAN GYPSUM CO -- Types AGX-1(finish rating 23 min.), M-Glass (finish rating 23 min.), Type AGX-11 (finish rating 26 min), Type AGX-12 (finish rating 22 min), Type LightRoc (finish rating 23 min.) or Type AG-C

BEIJING NEW BUILDING MATERIALS PUBLIC LTD CO -- Type DBX-1 (finish rating 24 min)

CABOT MANUFACTURING ULC -- Type X (finish rating 22 min), 5/8 Type X, Moisture Resistant Type X, Gypsum Sheathing Type X, Mold & Mildew Resistant Type X and Mold & Mildew Resistant AR Type X, Type Blueglass Exterior Sheathing, 5/8 in. Type C.

CERTAINTEED GYPSUM INC -- Type C, Type X-1 (finish rating 26 min); Type EGRG or GlasRoc (finish rating 23 min), Type LWTX (finish rating 18 min),

CGC INC -- Type AR (finish rating 24 min), Type C (finish rating 24 min), Type IP-AR (finish rating 24 min), Type IPC-AR (finish rating 24 min), Type IP-X1 (finish rating 24 min), Type IP-X2 (finish rating 24 min), Type SCX (finish rating 24 min), Type SHX (finish rating 24 min), Type ULX (finish rating 22 min), Type WRC (finish rating 24 min), Type WRX (finish rating 24 min), Type ULIX (finish rating 20 min)

GEORGIA-PACIFIC GYPSUM L L C -- Type 5 (finish rating 26 min), Type 6 (finish rating 23 min), Type 9 (finish rating 26 min), Type C (finish rating 26 min), Type DGG (finish rating 20 min), Type GPFS1 (finish rating 20 min), Type GPFS2 (finish rating 20 min), Type GPFS6 (finish rating 26 min), Type DS, Type DAP, Type DD (finish rating 20 min), Type DA, Type DAPC, Type LS (finish rating 23 min), Type X, Veneer Plaster Base - Type X, Water Rated - Type X, Sheathing - Type X, Soffit - Type X, Type LWX (finish rating 22 min), Veneer Plaster Base-Type LWX (finish rating 22 min), Water Rated-Type LWX (finish rating 22 min), Sheathing Type-LWX (finish rating 22 min), Soffit-Type LWX (finish rating 22 min), Type DGLW (finish rating 22 min), Water Rated-Type DGLW (finish rating 22 min), Sheathing Type- DGLW (finish rating 22 min), Soffit-Type DGLW (finish rating 22 min), Type LWX (finish rating 22 min), Type LW2X (finish rating 22 min), Veneer Plaster Base - Type LW2X (finish rating 22 min), Water Rated - Type LW2X (finish rating 22 min), Sheathing - Type LW2X (finish rating 22 min), Soffit - Type LW2X (finish rating 22 min), Type DGL2W (finish rating 22 min), Water Rated - Type DGL2W (finish rating 22 min), Sheathing - Type DGL2W (finish rating 22 min)

NATIONAL GYPSUM CO -- Type FSK (finish rating 20 min), Type FSK-G (finish rating 20 min), Type FSW (finish rating 20 min), Type FSW-2 (finish rating 24 min), Type FSW-3 (finish rating 20 min), Type FSW-5 (finish rating 22 min), Type FSW-G (finish rating 20 min), Type FSK-C (finish rating 20 min), Type FSW-C (finish rating 20 min), Type FSMR-C, Type FSW-6 (finish rating 20 min), Type FSL (finish rating 24 min), Type FSW-8, Type FSLX (finish rating 21 min), Type RSX (finish rating 26 min).

NATIONAL GYPSUM CO -- Riyadh, Saudi Arabia -- Type FR, or WR.

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM -- Types C, PG-2 (finish rating 20 min), PG-3 (finish rating 20 min), Types PG-3W, PG-5W (finish rating 20 min), Type PG-4 (finish rating 20 min), Type PG-6 (finish rating 23 min), Types PG-3WS, PG-5WS, PGS-WRS (finish rating 20 min), Types PG-5, PG-9 (finish rating 26 min), PG-11, PG-13 (Nails increased to 2 in.), Type PG-C or PGI (finish rating 26 min)

PANEL REY S A -- Type ARX, GREX, GRIX, PRX, PRC, PRC2; Types RHX, Guard Rey, MDX, ETX (finish rating 22 min), PRX2 (finish rating 21 min)

SIAM GYPSUM INDUSTRY (SARABURI) CO LTD -- Type EX-1 (finish rating 26 min)

THAI GYPSUM PRODUCTS PCL -- Type C, Type X (finish rating 26 min)

UNITED STATES GYPSUM CO -- Type AR (finish rating 24 min), Type C (finish rating 24 min), Type FRX-G (finish rating 29 min), Type IP-AR (finish rating 24 min), Type IPC-AR (finish rating 24 min), Type IP-X1 (finish rating 24 min), Type IP-X2 (finish rating 24 min), Type SHX (finish rating 24 min), Type SGX (finish rating 24 min), Type ULX (finish rating 22 min), Type WRX (finish rating 24 min), Type WRC (finish rating 24 min), Type ULIX (finish rating 20 min), Type SCX (finish rating 24 min)

USG BORAL DRYWALL SFZ LLC -- Type SGX (finish rating 24 min).

USG MEXICO S A DE C V -- Type AR (finish rating 24 min), Type C (finish rating 24 min), Type WRX (finish rating 24 min), Type WRC (finish rating 24 min), Type IP-X1 (finish rating 24 min), Type IP-X2 (finish rating 24 min), Type SHX (finish rating 24 min), SCX (finish rating 24 min), Type IP-AR (finish rating 24 min), Type IPC-AR (finish rating 24 min), Type ULX (finish rating 22 min)

3A. Gypsum Board* -- (As an alternate to Item 3) -- 5/8 in. thick gypsum panels, with beveled, square, or tapered edges, applied either horizontally or vertically. Gypsum panels fastened to framing with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a max 8 in. OC, with last screw 1 in. from edge of board. When used in widths of other than 48 in., gypsum boards are to be installed horizontally.

AMERICAN GYPSUM CO -- Types AGX-1 (finish rating 25 min.), M-Glass (finish rating 25 min.), AG-C (finish rating 25 min.), LighttRoc (finish rating 25 min.)

CERTAINTEED GYPSUM INC -- Type C, Type X-1 (finish rating 26 min), Type EGRG or GlasRoc, LWTX.

CGC INC -- Type AR (finish rating 24 min), Type C (finish rating 24 min), Type IP-AR (finish rating 24 min), Type IPC-AR (finish rating 24 min), Type IP-X1 (finish rating 24 min), Type IP-X2 (finish rating 24 min), Type SCX (finish rating 24 min), Type SHX (finish rating 24 min), Type WRC (finish rating 24 min), Type WRX (finish rating 24 min)

NATIONAL GYPSUM CO -- Type FSW (finish rating 24 min)

UNITED STATES GYPSUM CO -- Type AR (finish rating 24 min), Type SGX (finish rating 24 min), Type C (finish rating 24 min), Type WRX (finish rating 24 min), Type WRC (finish rating 24 min), Type IP-X1 (finish rating 24 min), Type IP-X2 (finish rating 24 min), Type SCX (finish rating 24 min), Type SHX (finish rating 24 min), Type FRX-G (finish rating 24 min), Type IP-AR (finish rating 24 min), Type IPC-AR (finish rating 24 min)

USG BORAL DRYWALL SFZ LLC -- Types C, SCX, SGX (finish rating 24 min).

USG MEXICO S A DE C V -- Type AR (finish rating 24 min), Type C (finish rating 24 min), Type WRX (finish rating 24 min), Type WRC (finish rating 24 min), Type IP-X1 (finish rating 24 min), Type IP-X2 (finish rating 24 min), Type SHX (finish rating 24 min), Type SCX, Type IP-AR (finish rating 24 min), Type IPC-AR (finish rating 24 min)

3B. Gypsum Board* -- (As an alternate to Item 3) -- Nom 3/4 in. thick, installed with 1-7/8 in. long cement coated nails as described in Item 3 or 1-3/8 in. long Type W coarse thread gypsum panel steel screws as described in Item 3A.

CGC INC -- Types AR, IP-AR

UNITED STATES GYPSUM CO -- Types AR, IP-AR

USG MEXICO S A DE C V -- Types AR, IP-AR

3C. Gypsum Board* -- (As an alternate to Items 3, 3A and 3B) -- 5/8 in. thick, 2 ft wide, tongue and groove edge, applied horizontally to one side of the assembly. Installed with 1-7/8 in. long cement coated nails as described in Item 3 or 1-1/4 in. long Type W coarse thread gypsum panel steel screws as described in Item 3A. Joint covering (Item 2) not required.

CGC INC -- Type SHX

UNITED STATES GYPSUM CO -- Type SHX

USG MEXICO S A DE C V -- Type SHX

3D. Gypsum Board* -- (As an alternate to Items 3, 3A, 3B, or 3C -- Not Shown) -- For Direct Application to Studs Only- Nom 5/8 in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Wallboard secured to studs with 1-5/8 in. long Type W coarse thread gypsum panel steel screws spaced 8 in. OC at perimeter and in the field. Lead batten strips required behind vertical joints of lead backed gypsum wallboard and optional at remaining stud locations. Lead batten strips, min 1-1/2 in. wide, max 10 ft long with a max thickness of 0.125 in. placed on the face of studs and attached to the stud with two 1 in. long Type S-12 pan head steel screws, one at the top of the strip and one at the bottom of the strip. Lead discs or tabs may be used in lieu of or in addition to the lead batten strips or optional at other locations. Max 3/4 in. diam by max 0.125 in. thick lead discs compression fitted or adhered over steel screw heads or max 1/2 in. by 1-1/4 in. by max 0.125 in. thick lead tabs placed on gypsum boards underneath screw locations prior to the installation of the screws. Lead batten strips to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C".

RAY-BAR ENGINEERING CORP -- Type RB-LBG (finish rating 24 min)

3E. Gypsum Board* -- (As an alternate to Items 3, 3A, 3B, 3C, and 3D) -- 5/8 in. thick gypsum panels, with square edges, applied either horizontally or vertically. Gypsum panels fastened to framing with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a max 8 in. OC, with last 2 screws 1 and 4 in. from edge of board or nailed 7 in. OC with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 15/64 in. diam heads. When used in widths of other than 48 in., gypsum boards are to be installed horizontally.

GEORGIA-PACIFIC GYPSUM L L C -- Type DGG (finish rating 20 min), GreenGlass Type X (finish rating 23 min)

3F. Gypsum Board* -- (As an alternate to Items 3, 3A, 3B, 3C, 3D, and 3E) -- 5/8 in. glass-mat faced with square edges, applied either horizontally or vertically. Gypsum panels nailed 7 in. OC around the perimeter and in the field with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 15/64 in. diam heads. Nails shall be placed 1 inch and 3 inch from horizontal joints and 7 inch OC thereafter.

CGC INC -- Type USGX (finish rating 22 min)

UNITED STATES GYPSUM CO -- Type USGX (finish rating 22 min.)

USG BORAL DRYWALL SFZ LLC -- , Type USGX (finish rating 22 min.)

USG MEXICO S A DE C V -- Type USGX (finish rating 22 min.)

3G. Gypsum Board* -- (As an alternate to Items 3 through 3F) -- 5/8 in. thick paper surfaced applied vertically. Gypsum panels nailed 7 in. OC with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 15/64 in. diam heads.

GEORGIA-PACIFIC GYPSUM L L C -- Type X ComfortGuard Sound Deadening Gypsum Board (finish rating 27 min)

3H. Gypsum Board* -- (As an alternate to Items 3) -- Not to be used with items 6 or 7. 5/8 in. thick paper surfaced applied vertically only. Gypsum panels nailed 7 in. OC with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 15/64 in. diam heads.

NATIONAL GYPSUM CO -- Type SBWB

3I. Gypsum Board* -- (As an alternate to Items 3 through 3H, Not Shown) -- Nominal 5/8 in. thick, 4 ft wide panels, applied vertically. Panels nailed 7 in. OC with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 15/64 in. diam heads. Panel joints covered with paper tape and two layers of joint compound. Nailheads covered with two layers of joint compound.

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM -- Type QuietRock ES (finish rating 20 min)

3J. Gypsum Board* -- (As an alternate to Item 3) -- 5/8 in. thick paper surfaced applied vertically or horizontally. Gypsum panels secured with 1-1/4 in. Type W coarse thread gypsum panel steel screws spaced a maximum of 12 in. OC.

CERTAINTEED GYPSUM INC -- Type SilentFX

3K. Gypsum Board* -- (As an alternate to Item 3) -- 5/8 in. thick gypsum panels, with beveled, square, or tapered edges, applied either horizontally or vertically. Gypsum panels fastened to framing with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a maximum 8 in. OC with the last screw 1 in. from the edge of the board. When used in widths other than 48 in., gypsum panels are to be installed horizontally.

NATIONAL GYPSUM CO -- Type FSK (finish rating 20 min), Type FSK-G (finish rating 20 min), Type FSW (finish rating 20 min), Type FSW-2 (finish rating 24 min), Type FSW-3 (finish rating 20 min), Type FSW-5 (finish rating 22 min), Type FSW-G (finish rating 20 min), Type FSK-C (finish rating 20 min), Type FSW-C (finish rating 20 min), Type FSMR-C, Type FSW-6 (finish rating 20 min), Type FSL (finish rating 24 min).

3L. Gypsum Board* -- (As an alternate to Item 3) -- For Direct Application to Studs Only -- Nom 5/8 in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Wallboard secured to studs with 1-5/8 in. long Type W coarse thread gypsum panel steel screws spaced 8 in. OC at perimeter and in the field. Lead batten strips required behind vertical joints of lead backed gypsum wallboard and optional at remaining stud locations. Lead batten strips, min 2 in. wide, max 10 ft long with a max thickness of 0.140 in. placed on the face of studs and attached to the stud with two 1 in. long Type S-8 pan head steel screws, one at the top of the strip and one at the bottom of the strip. Lead discs, max 5/16 in. diam by max 0.140 in. thick. compression fitted or adhered over the screw heads. Lead batten strips to have a purity of 99.5% meeting the Federal specification QQ-L-201f, Grades "B, C or D".

MAYCO INDUSTRIES INC -- "X-Ray Shielded Gypsum"

3M. Gypsum Board* -- (As an alternate to Items 3) -- For Direct Application to Studs Only -- For use as the base layer or as the face layer. Nom 5/8 in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Wallboard secured to studs with 1-5/8 in. long Type W coarse thread gypsum panel steel screws spaced 8 in. OC at perimeter and in the field when applied as the base layer. When applied as the face layer screw length to be increased to 2-1/2 in. Lead batten strips required behind vertical joints of lead backed gypsum wallboard and optional at remaining stud locations. Lead batten strips, min 2 in. wide, max 8 ft long with a max thickness of 0.14 in. placed on the face of studs and attached to the stud with construction adhesive and two 1 in. long Type S-12 pan head steel screws, one at the top of the strip and one at the bottom of the strip. Lead discs, nominal 3/8 in. diam by max 0.085 in. thick. Compression fitted or adhered over the screw heads. Lead batten strips and discs to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C". Fasteners for face layer gypsum panels (Items 4, 4A or 4B) when installed over lead backed board to be min 2-1/2 in. Type S-12 bugle head steel screws spaced as described in Item 4.

RADIATION PROTECTION PRODUCTS INC -- Type RPP - Lead Lined Drywall

3O. Wall and Partition Facings and Accessories* -- (As an alternate to Item 3, Not Shown) -- Nominal 5/8 in. thick, 4 ft wide panels, applied vertically. Panels nailed 7 in. OC with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 15/64 in. diam heads. Panel joints covered with paper tape and two layers of joint compound. Nailheads covered with two layers of joint compound.

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM -- Type QuietRock 527 (finish rating 24 min).

3P. Gypsum Board* -- (As an alternate to Item 3, Not Shown) -- Two layers nom. 5/16 in. thick gypsum panels applied vertically or horizontally. Horizontal edge joints and horizontal butt joints on opposite sides of studs need not be staggered or backed by wood studs. Horizontal joints on the same side between face and base layers need not be staggered. Base layer gypsum panels fastened to studs with 1-1/4 in. long drywall nails spaced 8 in. OC. Face layer gypsum panels fastened to studs with 1-7/8 in. long drywall nails spaced 8 in. OC starting with a 4" stagger.

NATIONAL GYPSUM CO -- Type FSW (finish rating 25 min)

3R. Gypsum Board* -- (As an alternate to Item 3. For use with Item 5H) -- Any 5/8 in. thick, 4 ft. wide, Gypsum Board listed in Item 3 above. Applied either horizontally or vertically, and screwed to panels with 1-5/8 in. long Type W coarse thread steel screws at 8 in. OC at perimeter and in the field with the last two screws 4 and 3/4 in. from the edges of the board when applied as the base layer. When used in widths other than 48 in., gypsum panels are to be installed horizontally.

3S. Gypsum Board* -- 3/4 in. thick paper or vinyl surfaced, with beveled, square, or tapered edges, applied either horizontally or vertically. Gypsum panels secured as described in Item 3 with nail length increased to 2 in.

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM -- Type PG-13

3T. Wall and Partition Facings and Accessories* -- (As an alternate to 5/8 in. thick board as outlined in Item 3) -- Nominal 1-3/8 in. thick, 4 ft wide panels, applied vertically or horizontally. Fastened with #6 x 2 in. long drywall screws spaced 8 in. OC along the perimeter and 12 in. OC in the field.

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM -- Type QuietRock 545

3U. Gypsum Board* -- (As an alternate to Item 3 - For use with Foamed Plastic products, Item 5J) -- 5/8 in. thick, 4 ft. wide, applied vertically with vertical joints centered over studs and staggered one stud cavity on opposite sides of studs. Gypsum panels nailed 7 in. OC with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 15/64 in. diam heads.

AMERICAN GYPSUM CO -- Types AGX-1

BEIJING NEW BUILDING MATERIALS PUBLIC LTD CO -- Type DBX-1

CABOT MANUFACTURING ULC -- Type X

CERTAINTEED GYPSUM INC -- Type X

CGC INC -- Type SCX

PANEL REY S A -- Type ARX, PRX

SIAM GYPSUM INDUSTRY (SARABURI) CO LTD -- Type EX-1

THAI GYPSUM PRODUCTS PCL -- Type X

UNITED STATES GYPSUM CO -- Types SCX and SGX

USG BORAL DRYWALL SFZ LLC -- Types SCX and SGX

USG MEXICO S A DE C V -- Type SCX

3V. Gypsum Board* -- (As an alternate to Item 3. For use with Item 5K) -- Any 5/8 in. thick, 4 ft. wide, Gypsum Board listed in Item 3 above. Applied vertically with vertical joints centered over studs and staggered one stud cavity on opposite sides of studs. Gypsum panels secured to studs with 1-5/8 in. long Type W coarse thread gypsum panel steel screws spaced 8 in. OC at perimeter and in the field.

3W. Gypsum Board* -- (As an alternate to Item 3. For use with Item 5L) -- Any 5/8 in. thick, 4 ft. wide, Gypsum Board listed in Item 3 above. Applied vertically with vertical joints centered over studs and staggered one stud cavity on opposite sides of studs. Gypsum panels secured to studs with 1-1/4 in. long Type W screws spaced 8 in. OC at perimeter and in the field.

3X. Gypsum Board* -- (As an alternate to Item 3. For use with Item 5M) -- Any 5/8 in. thick, 4 ft. wide, Gypsum Board listed in Item 3 above. Two layers applied vertically with vertical joints centered over studs and staggered one stud cavity on opposite sides of studs. Joints in outer layers staggered with joints in inner layers. Inner layer secured to studs with 1-1/4 in. long Type W screws spaced 8 in. OC at perimeter and in the field. Outer layer secured to studs with 1-7/8 in. long Type W screws spaced 8 in. OC at the perimeter and in the field.

4. Steel Corner Fasteners -- (Optional) -- For use at wall corners. Channel shaped, 2 in. long by 1 in. high on the back side with two 1/8 in. wide cleats protruding into the 5/8 in. wide channel, fabricated from 24 gauge galv steel. Fasteners applied only to the end or cut edge (not along tapered edges) of the gypsum board, no greater than 2 in. from corner of gypsum board, max spacing 16 in. OC. Nailed to adjacent stud through tab using one No. 6d cement coated nail per fastener. Corners of wall board shall be nailed to top and bottom plate using No. 6d cement coated nails.

5. Batts and Blankets* -- (Optional -- Required when Item 6A is used (RC-1)) -- Glass fiber or mineral wool insulation. Placed to completely or partially fill the stud cavities. When Item 6A is used, glass fiber or mineral wool insulation shall be friction-fitted to completely fill the stud cavities.

CERTAINTEED CORP

JOHNS MANVILLE

KNAUF INSULATION LLC

MANSON INSULATION INC

ROCKWOOL -- Types Acoustical Fire Batts and Type AFB, min. density 1.69 pcf / 27.0 kg/m$^3$

ROCKWOOL MALAYSIA SDN BHD -- Type Acoustical Fire Batts

ROCK WOOL MANUFACTURING CO -- Delta Board

THERMAFIBER/OWENS CORNING -- Type SAFB, SAFB FF

5A. Fiber, Sprayed* -- (Not Shown -- Not for use with Item 6) -- As an alternate to Batts and Blankets (Item 5) -- Spray applied cellulose material. The fiber is applied with water to completely fill the enclosed cavity in accordance with the application instructions supplied with the product with a nominal dry density of 2.7 lb/ft$^3$. Alternate Application Method: The fiber is applied without water or adhesive at a nominal dry density of 3.5 lb/ft$^3$, in accordance with the application instructions supplied with the product. When Item 6B is used, Fiber, Sprayed shall be SANCTUARY.

Applegate Greenfiber Acquisition LLC -- Insulmax and SANCTUARY for use with wet or dry application.

5B. Fiber, Sprayed* -- (Not Shown - Not for use with Item 6) -- As an alternate to Batts and Blankets (Item 5) - Spray applied cellulose insulation material. The fiber is applied with water to interior surfaces in accordance with the application instructions supplied with the product. Applied to completely fill the enclosed cavity. Minimum dry density of 4.3 pounds per cubic ft.

NU-WOOL CO INC -- Cellulose Insulation

5C. Batts and Blankets* -- Required for use with resilient channels, Item 7, 3 in. thick mineral wool batts, friction-fitted to fill interior of wall.

THERMAFIBER/OWENS CORNING -- Type SAFB, SAFB FF

5D. Glass Fiber Insulation -- (As an alternate to Item 5C) -- 3 in. thick glass fiber batts bearing the UL Classification Marking as to Surface Burning and/or Fire Resistance, friction-fitted to fill the interior of the wall. See Batts and Blankets (BKNV or BZJZ) Categories for names of Classified companies.

5E. Batts and Blankets* -- (Required for use with Wall and Partition Facings and Accessories, Item 3D) -- Glass fiber insulation, nom 3-1/2 in. thick, min. density of 0.80 pcf, with a flame spread of 25 or less and a smoke developed of 50 or less, friction-fitted to completely fill the stud cavities. See Batts and Blankets Category (BKNV) for names of manufacturers.

5F. Fiber, Sprayed* -- (Optional, Not Shown -- Not for use with Items 6, 6A, 6B, 6C, or 6D) -- As an alternate to Batts and Blankets (Item 5) and Item 5A - Spray applied granulated mineral fiber material. The fiber is applied with adhesive, at a minimum density of 4.0 pcf, to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. See Fiber, Sprayed (CCAZ).

AMERICAN ROCKWOOL MANUFACTURING, LLC -- Type Rockwool Premium Plus

5G. Fiber, Sprayed* -- (Optional, Not Shown -- Not for use with Items 6, 6A, 6B, 6C, or 6D). -- As an alternate to Batts and Blankets (Item 5) and Item 5A - Brown Colored Spray applied cellulose fiber. The fiber is applied with water to completely fill the enclosed stud cavity in accordance with the application instructions supplied with the product. The minimum dry density shall be 4.30 lbs/ft$^3$.

INTERNATIONAL CELLULOSE CORP -- Celbar-RL

5H. Foamed Plastic* -- (Optional -For use with Item 3R) -- Spray applied, foamed plastic insulation, at any thickness from partial fill to completely filling stud cavity.

Amrize Building Envelope LLC -- Nexseal™ 2.0, Onepass HFO or Nexseal™ 2.0 LE Spray Foam and Enverge SucraSeal.

5I. Fiber, Sprayed* -- (Not Shown -- Not for use with Item 6) -- As an alternate to Batts and Blankets (Item 5) - Spray-applied cellulose material. The fiber is applied with water to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. To facilitate the installation of the material, any thin, woven or non-woven netting may be attached by any means possible to the outer face the studs. The material shall reach equilibrium moisture content before the installation of materials on either face of the studs. The minimum dry density shall be 5.79 lbs/ft$^3$.

Applegate Greenfiber Acquisition LLC-- Applegate Advanced Stabilized Cellulose Insulation

5J. Foamed Plastic* -- (Optional, Not Shown - For use with Item 3U) -- Spray applied, foamed plastic insulation, at any thickness from partial fill to completely filling stud cavity.

Amrize Building Envelope LLC -- Types GacoEZSpray F4500, GacoProFill FR6500R, Gaco 052N, GacoOnePass F1850, GacoOnePass Low GWP F1880, and Gaco WallFoam 183M

5K. Foamed Plastic* -- (Optional, Not Shown - For use with Item 3V) -- Spray applied, foamed plastic insulation, at any thickness from partial fill to completely filling stud cavity.

CARLISLE SPRAY FOAM INSULATION -- Types SealTite ONE, SealTite Pro Closed Cell (CC), SealTite Pro Open Cell (OC), SealTite Pro OCX, SealTite Pro No Trim 21, SealTite Pro One Zero, Foamsulate Closed Cell, Foamsulate OCX, Foamsulate 70, and Foamsulate HFO.

5L. Foamed Plastic* - (Optional, Not Shown - For use with Item 3W) - Spray applied, foamed plastic insulation, at any thickness from partial fill to completely filling stud cavity.

BASF CORP - Types Enertite® G, Walltite® MAX, Walltite® One, and Enertite® Max

5M. Foamed Plastic* - (Optional, Not Shown - For use with Item 3X) - Spray applied, foamed plastic insulation, at any thickness from partial fill to completely filling stud cavity.

BASF CORP - Type Walltite® v.5

5N. Loose Fill Material* - Optional - (As an alternate to Items 5-5M) - Shredded glass fibers bearing the UL Classification Marking as to Surface Burning. Blown into wall cavities through pre-installed fabric stapled or adhered to studs.

CERTAINTEED LLC - Type InsulSafe R, InsulSafe SP, InsulSafe XC, Northern White,or OPTIMA

6. Steel Framing Members* -- (Optional, Not Shown) -- Furring channels and Steel Framing Members as described below:

a. Furring Channels -- Formed of No. 25 MSG galv steel. 2-9/16 in. or 2-23/32 in. wide by 7/8 in. deep, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping #6 framing screws, min. 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Gypsum board attached to furring channels as described in Item 3.

b. Steel Framing Members* -- Used to attach furring channels (Item 6a) to studs. Clips spaced 48 in. OC. RSIC-1 and RSIC-1 (2.75) clips secured to studs with No. 8 x 2-1/2 in. coarse drywall screw through the center grommet. RSIC-V and RSIC-V (2.75) clips secured to studs with No. 8 x 1-1/2 in. coarse drywall screw through the center hole. Furring channels are friction fitted into clips. RSIC-1 and RSIC-V clips for use with 2-9/16 in. wide furring channels. RSIC-1 (2.75) and RSIC-V (2.75) clips for use with 2-23/32 in. wide furring channels.

PAC INTERNATIONAL L L C -- Types RSIC-1, RSIC-V, RSIC-1 (2.75), RSIC-V (2.75)

6A. Steel Framing Members* -- (Optional, Not Shown) -- Furring channels and Steel Framing Members on one side of studs as described below:

a. Furring Channels -- Formed of No. 25 MSG galv steel, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. Batts and Blankets placed in stud cavity as described in Item 5. Two layers of gypsum board attached to furring channels as described in Item 3.

b. Steel Framing Members* -- Used to attach furring channels (Item 6Aa) to one side of studs only. Clips spaced 48 in. OC., and secured to studs with two No. 8 x 2-1/2 in. coarse drywall screws, one through the hole at each end of the clip. Furring channels are friction fitted into clips.

KINETICS NOISE CONTROL INC -- Type Isomax

6B. Steel Framing Members* -- (Optional, Not Shown) -- Furring channels and Steel Framing Members as described below:

a. Furring Channels -- Formed of No. 25 MSG galv steel. 2-3/8 in. wide by 7/8 in. deep, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping #6 framing screws, min. 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Gypsum board attached to furring channels as described in Item 3.

b. Steel Framing Members* -- Used to attach furring channels (Item 6Ba) to studs. Clips spaced 48 in. OC. Genie clips secured to studs with No. 8 x 1-1/2 in. coarse drywall screw through the center hole. Furring channels are friction fitted into clips.

PLITEQ INC -- Type Genie Clip

6C. Steel Framing Members* -- (Optional, Not Shown) -- Furring channels and Steel Framing Members as described below:

a. Furring Channels -- Formed of No. 25 MSG galv steel. Spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 AWG galvanized steel wire. Gypsum board attached to furring channels as described in Item 3.

b. Steel Framing Members* -- Used to attach furring channels (Item 6Ca) to studs. Clips spaced 48 in. OC., and secured to studs with No. 2 in. coarse drywall screw with 1 in. diam washer through the center hole. Furring channels are friction fitted into clips.

STUDCO BUILDING SYSTEMS -- RESILMOUNT Sound Isolation Clips - Type A237 or A237R

6D. Steel Framing Members* -- (Optional, Not Shown) -- Furring channels and Steel Framing Members as described below:

a. Furring Channels -- Formed of No. 25 MSG galv steel, spaced 24 in. OC, and perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels overlapped 6 in. and secured in place with a double strand of No. 18 AWG twisted steel wire. Gypsum board attached to furring channels as described in Item 3.

b. Steel Framing Members* -- Used to attach furring channels (Item 6Da) to studs. Clips spaced 48 in. OC., and secured to studs with No. 8 x 2-1/2 in. coarse drywall screw through the center hole. Furring channels are friction fitted into clips.

REGUPOL AMERICA -- Type SonusClip

6E. Steel Framing Members* -- (Optional, Not Shown) -- Resilient channels and Steel Framing Members as described below:

a. Resilient Channels -- Formed of No. 25 MSG galv steel, spaced 24 in. OC, and perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels overlapped 6 in. and secured in place with two No. 8 15 x 1/2 in. Philips Modified Truss screws spaced 2-1/2 in. from the center of the overlap. Gypsum board attached to resilient channels as described in Item 3.

b. Steel Framing Members* -- Used to attach resilient channels (Item 6Ea) to studs. Clips spaced 48 in. OC., and secured to studs with No. 8 x 2-1/2 in. coarse drywall screw through the center hole. Resilient channels are secured to clips with one No. 10 x 1/2 in. pan-head self-drilling screw.

KEENE BUILDING PRODUCTS CO INC - Type RC+ Assurance Clip

6F. Steel Framing Members* -- (Optional, Not Shown) -- Furring channels and Steel Framing Members as described below:

a. Furring Channels -- Formed of No. 25 MSG galv steel. 2-23/32 in. wide by 7/8 in. deep, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping #6 framing screws, min. 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Gypsum board attached to furring channels as described in Item 3.

b. Steel Framing Members* -- Used to attach furring channels (Item 6Fa) to studs. Clips spaced 48 in. OC. Clips secured to studs with No. 8 x 2-1/2 in. coarse drywall screw through the center grommet. Furring channels are friction fitted into clips.

CLARKDIETRICH BUILDING SYSTEMS -- Type ClarkDietrich Sound Clip

6G. Steel Framing Members* -- (Optional, Not Shown) -- Used as an alternate method to attach resilient channels to wall studs. A resilient sound isolation accessory shall be used at each attachment point of the resilient channels and spaced max 16 in. O.C. Channel ends butted and centered under the structural members and attached with one accessory at each end. Additional accessories used to hold resilient channels that support the gypsum board end joints. The accessory envelops the mounting edge of the resilient channel. The accessory and resilient channel are fastened to the structural members with the screws supplied with the accessory and per the accessory manufacturer's installation instructions.

PAC INTERNATIONAL L L C -- Type RC-1 Boost

6H. Steel Framing Members* -- (Optional on one or both sides, not shown, for single or double layer systems, not for use with Items 3D, 3L or 3M) -- As an alternate to Item 6) -- Furring channels and Steel Framing Members as described below:

a. Furring Channels -- Formed of No. 25 MSG galv steel. 2-23/32 in. wide by 7/8 in. deep, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping #6 framing screws, min. 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Gypsum board attached to furring channels as described in Item 3.

b. Steel Framing Members* -- Used to attach furring channels (Item 6Ha) to studs. Clips spaced maximum 48 in. OC. staggered on adjacent furring channels and secured to studs with No. 8 x 2-1/2 in. coarse drywall screw through the center grommet. Furring channels are friction fitted into clips.

ISOTECH INDUSTRIES INC. -- Type ISOSTUD

7. Resilient Channel -- Optional -- Not Shown -- For use on one side of the wall - Resilient channels, 25 MSG galv steel, spaced vertically 24 in. OC, flange portion screw attached to one side of studs with 1-1/4 in. long diamond shaped point, double lead Phillips head steel screws. When resilient channels are used, insulation, Items 5C or 5D is required.

8. Caulking and Sealants -- (Not Shown, Optional) -- A bead of acoustical sealant applied around the partition perimeter for sound control.

9. STC Rating -- The STC Rating of the wall assembly is 56 when it is constructed as described by Items 1 through 6, except:

A. Item 2, above -- Nailheads Shall be covered with joint compound.

B. Item 2, above -- Joints As described, shall be covered with fiber tape and joint compound.

C. Item 5, above -- Batts and Blankets* The cavities formed by the studs shall be friction fit with R-19 unfaced fiberglass insulation batts measuring 6-1/4 in. thick and 15-1/4 in. wide.

D. Item 6, above -- Steel Framing Members* Type RSIC-1 clips shall be used to attach gypsum board to studs on either side of the wall assembly.

E. Item 8, above -- Caulking and Sealants (Not Shown) A bead of acoustical sealant shall be applied around the partition perimeter for sound control.

F. Steel Corner Fasteners (Item 4), Fiber, Sprayed (Items 5A and 5B) and Steel Framing Members (Item 6A), not evaluated as alternatives for obtaining STC rating.

10. Wall and Partition Facings and Accessories* -- (Optional, Not Shown) -- Nominal 1/2 in. thick, 4 ft wide panels, for optional use as an additional layer on one or both sides of the assembly. Panels attached in accordance with manufacturer's recommendations. When the QR-500 or QR-510 panel is installed between the wood framing and the UL Classified gypsum board, the required UL Classified gypsum board layer(s) is/are to be installed as indicated as to fastener type and spacing, except that the required fastener length shall be increased by a minimum of 1/2 in. Not evaluated or intended as a substitute for the required layer(s) of UL Classified Gypsum Board.

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM -- Type QuietRock QR-500 and QR-510

11. Cementitious Backer Units* -- (Optional Item Not Shown -- For Use On Face Of 1 Hr Systems With All Standard Items Required) - 7/16 in., 1/2 in., 5/8 in., 3/4 in. or 1 in. thick, min. 32 in. wide. Applied vertically or horizontally with vertical joints centered over studs. Fastened to studs and runners with cement board screws of adequate length to penetrate stud by a minimum of 3/8 in. for steel framing members, and a minimum of 3/4 in. for wood framing members spaced a max of 8 in. OC. When 4 ft. wide boards are used, horizontal joints need not be backed by framing.

NATIONAL GYPSUM CO -- Type DuraBacker, PermaBase, DuraBacker Plus, or PermaBase Plus

12. Non-Bearing Wall Partition Intersection -- (Optional) --Two nominal 2 by 4 in. studs or nominal 2 by 6 in. studs nailed together with two 3 in. long 10d nails spaced a max. 16 in. OC. vertically and fastened to one side of the minimum 2 by 4 in. stud with 3 in. long 10d nails spaced a max. 16 in. OC. vertically. Intersection between partition wood studs to be flush with the 2 by 4 in. studs. The wall partition wood studs are to be framed by with a second 2 by 4 in. wood stud fastened with 3 in. long 10d nails spaced a max. 16 in. OC. vertically. Maximum one non-bearing wall partition intersection per stud cavity. Non-bearing wall partition stud depth shall be at a minimum equal to the depth of the bearing wall.

13. Mesh Netting -- (Not Shown) -- Any thin, woven or non-woven fibrous netting material attached with staples to the outer face of one row of studs to facilitate the installation of the sprayed fiber from the opposite row.

14. Mineral and Fiber Board* -- (Optional, Not Shown) -- For optional use as an additional layer on one side of wall. Nom 1/2 in. thick, 4 ft wide with long dimension parallel and centered over studs. Attached to framing with 2 in. long Type W steel screws, spaced 12 in. OC. The required UL Classified gypsum board layer(s) is/are to be installed as indicated as to fastener type and spacing, except that the required fastener length shall be increased by a minimum of 1/2 in. Not evaluated or intended as a substitute for the required layer(s) of UL Classified Gypsum Board.

HOMASOTE CO -- Homasote Type 440-32

14A. Mineral and Fiber Board* -- (Optional, Not Shown) -- For use with Items 14B-14E) -- For optional use as an additional layer on one side of wall. Nom 1/2 in. thick, 4 ft wide with long dimension parallel and centered over studs. Attached to framing with minimum 1-3/8 in. long ring shanked nails or 1-1/4 in. long Type W steel screws, spaced 12 in. OC along board edges and 24 in. OC in field of board along intermediate framing. Not evaluated or intended as a substitute for the required layer(s) of UL Classified Gypsum Board.

HOMASOTE CO -- Homasote Type 440-32

14B. Glass Fiber Insulation -- (For use with Item 14A) -- 3-1/2 in. thick glass fiber batts bearing the UL Classification Marking as to Surface Burning and/or Fire Resistance, placed to fill the interior of the wall. See Batts and Blankets (BKNV or BZJZ) categories for names of Classified companies.

14C. Batts and Blankets* -- (As an alternate to Item 14B, For use with Item 14A), 3 in. thick mineral wool batts, placed to fill interior of wall, attached to the 3-1/2 in. face of the studs with staples placed 24 in. OC.

THERMAFIBER/OWENS CORNING -- Type SAFB, SAFB FF

14D. Adhesive -- (For use with Item 14A) -- Construction grade adhesive applied in vertical, serpentine, nominal 3/8 in. wide beads down the length of both vertical edges of Mineral and Fiber Board (Item 14A).

14E. Gypsum Board* -- (For use with Item 14A) -- 5/8 in. thick, 4 ft wide, applied vertically over Mineral and Fiber Board (Item 14A) with vertical joints located anywhere over stud cavities. Secured to mineral and fiber boards with 1-1/2 in. Type G Screws spaced 8 in. OC along edges of each vertical joint and 12 in. OC in intermediate field of the Mineral and Fiber Board (Item 14A). Secured to outermost studs and bearing plates with 2 in. long Type S screws spaced 8 in. OC. Gypsum Board joints covered with paper tape and joint compound. Screw heads covered with joint compound. Finish Rating 30 Min.

AMERICAN GYPSUM CO -- Type AG-C

CABOT MANUFACTURING ULC -- 5/8 in. Type C.

CGC INC -- Types C, IP-X2, IPC-AR

GEORGIA-PACIFIC GYPSUM L L C -- Types 5, DAPC, TG-C

NATIONAL GYPSUM CO -- Types FSK-C, FSW-C

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM -- Type PG-C

PANEL REY S A -- Type PRC

THAI GYPSUM PRODUCTS PCL -- Type C

UNITED STATES GYPSUM CO -- Types C, IP-X2, IPC-AR

USG BORAL DRYWALL SFZ LLC -- Type C

USG MEXICO S A DE C V -- Types C, IP-X2, IPC-AR

14F. Mineral and Fiber Board -- (Optional, Not Shown) -- For optional use as an additional layer on one side of wall - Nom 1/2 in. thick, 4 ft wide, square edge fiber boards applied vertically to studs on one side of the wall in between the wood studs and the UL Classified Gypsum Board (Item 3). Fiber boards installed with 1-1/4 in. long, Type W, bugle head, coarse thread gypsum board screws spaced 12 in. OC max, with the last screws spaced 2 in. and 6 in. from edge of board. Gypsum board (Item 3) installed as indicated as to fastener type and spacing, except that the required fastener length shall be increased by a minimum of 1/2 in. Not evaluated or intended as a substitute for the required layer(s) of UL Classified Gypsum Board.

BLUE RIDGE FIBERBOARD INC -- SoundStop

14G. Building Units - (Optional Item Not Shown - For use over Gypsum Board, Item 3) 1 in., 2 in. or 3 in. thick, 4 ft. wide - Applied vertically or horizontally with vertical joints centered over studs. Fastened to studs and runners with wafer head screws of adequate length to penetrate framing by a minimum of of ¾ in., spaced a max 8 in. o.c.

NATIONAL GYPSUM CO - Type PBCI

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

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FIRE RATING FOR 1 HOUR BEARING WALL RATING
U.L. DESIGN NO. U305

FIRE RATING FOR 1 HOUR BEARING WALL RATING
U.L. DESIGN NO. U305

FIRE RATING FOR 1 HOUR BEARING WALL RATING
U.L. DESIGN NO. U305

FIRE RATING FOR 1 HOUR BEARING WALL RATING
U.L. DESIGN NO. U305

KONTOGIANNIS
& ASSOCIATES

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PROJECT:

TANNER'S
CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

FIRE RESISTANCE
RATINGS

DATE: 06/26/2026
REVISED:

GEORGE J. KONTOGIANNIS REGISTERED
No. AR00034309
STATE OF INDIANA
ARCHITECT

GEORGE J. KONTOGIANNIS, LICENSE #AR00034309
EXPIRATION DATE 12/31/2027

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- [ ] SUBMISSION SET 06/27/2025
- [ ] ZONING SET 05/07/2026
- [x] BID SET 06/26/2026
- [ ] PERMIT SET
- [ ] CONSTRUCTION SET

FR-2

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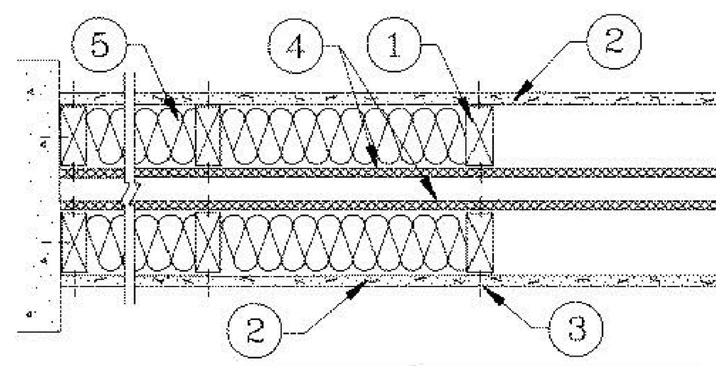
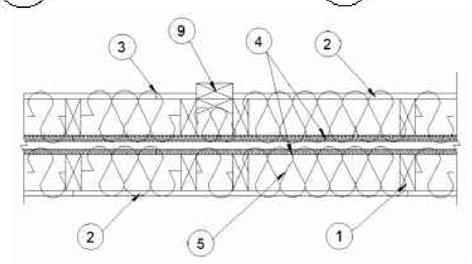
Design No. U341

November 14, 2025

Bearing Wall Rating — 1 Hr.
Finish Rating — Min 20 min.
This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be used — See Guide BXUV or BXUV7




* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

HORIZONTAL SECTION
1. Wood Studs — Nom 2 by 4 in., spaced 24 in. OC max. Cross braced at mid-height and effectively firestopped at top and bottom of wall. No min. air space between stud rows except to accommodate attachment of sheathing, where required. See items 4 and 5.
2. Gypsum Board* — Any 5/8 in. thick UL Classified Gypsum Board that is eligible for use in Design Nos. L501, G512 or U305. Nom 5/8 in. thick 4 ft wide. Gypsum board applied horizontally or vertically, unless specified below, and nailed to studs and bearing plates 7 in. OC with 6d cement coated nails, 1-7/8 in. long, 0.0915 in. shank diam and 1/4 in. diam head. As an alternate, No. 6 bugle head drywall screws, 1-7/8 in. long, may be substituted for the 6d cement coated nails.
When Steel Framing Members* (Item 6 or any alternate clips) are used, wallboard attached to furring channels with 1 in. long Type S bugle-head steel screws spaced 12 in. OC.
When used in widths other than 48 in., gypsum board to be installed horizontally.
AMERICAN GYPSUM CO (View Classification) — CKNX.R14196
BEIJING NEW BUILDING MATERIALS PUBLIC LTD CO (View Classification) — CKNX.R19374
CABOT MANUFACTURING ULC (View Classification) — CKNX.R25370
CERTAINTEED GYPSUM INC (View Classification) — CKNX.R3660
CGC INC (View Classification) — CKNX.R19751
CERTAINTEED GYPSUM INC (View Classification) — CKNX.R18482
GEORGIA-PACIFIC GYPSUM L L C (View Classification) — CKNX.R2717
NATIONAL GYPSUM CO (View Classification) — CKNX.R3501
PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM (View Classification) — CKNX.R7094
PANEL REY S A (View Classification) — CKNX.R21796
SIAM GYPSUM INDUSTRY (SARABURI) CO LTD (View Classification) — CKNX.R19262
THAI GYPSUM PRODUCTS PCL (View Classification) — CKNX.R27517
UNITED STATES GYPSUM CO (View Classification) — CKNX.R1319
USG BORAL DRYWALL SFZ LLC (View Classification) — CKNX.R38438
USG BORAL DRYWALL SFZ LLC (View Classification) — CKNX.R38438
USG MEXICO S A DE C V (View Classification) — CKNX.R16089
2A. Gypsum Board* — (As an alternate to Item 2, not shown) — Nominal 5/8 in. thick, 4 ft wide panels, applied vertically to studs and bearing plates on one side of the assembly with 1-5/8 in. long Type S screws spaced 12 in. OC at perimeter of panels and 8 in. OC in the field. Horizontal joints of vertically applied panels need not be backed by studs. Panel joints covered with paper tape and two layers of joint compound. Screwheads covered with two layers of joint compound. Batts and Blankets placed in stud cavity as described in Item 5C. Not evaluated for use with Steel Framing Members, Furring Channels or Fiber, Sprayed.
PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type QuietRock QR-530 (finish rating 23 min).
2B. Gypsum Board* — (As an alternate to Item 2, not shown) — Any 5/8 in. thick gypsum panels that are eligible for use in Design Nos. L501, G512 or U305, supplied by the Classified companies listed below shown in the Gypsum Board* (CKNX) category. Applied horizontally or vertically and attached to studs and bearing plates with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a max 8 in. OC, with last screw 1 in. from edge of board. When used in widths other than 48 in., gypsum board to be installed horizontally.
UNITED STATES GYPSUM CO
USG BORAL DRYWALL SFZ LLC
USG MEXICO S A DE C V
2C. Gypsum Board* — (As an alternate to Item 2, Not Shown) — 5/8 in. thick gypsum panels applied horizontally or vertically and attached to studs and bearing plates with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a max 8 in. OC, with last screw 1 in. from edge of board. When used in widths other than 48 in., gypsum board to be installed horizontally.
AMERICAN GYPSUM CO — Types AGX-1, M-Glass, AG-C, LightRoc
CERTAINTEED GYPSUM INC — Type C or Type X-1
NATIONAL GYPSUM CO — Type FSK, Type FSK-G, Type FSW, Type FSW-3, Type FSW-5, Type FSW-G, Type FSK-C, Type FSW-C, Type FSMR-C, Type FSW-6, Type FSL
THAI GYPSUM PRODUCTS PCL — Type C or Type X
2D. Gypsum Board* — (As an alternate to Items 2, 2A, 2B and 2C) — 5/8 in. thick gypsum panels, with square edges, applied either horizontally or vertically. Gypsum panels fastened to framing with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a max 8 in. OC, with last 2 screws 1 and 4 in. from edge of board or nailed as described in Item 2. When used in widths of other than 48 in., gypsum boards are to be installed horizontally.
GEORGIA-PACIFIC GYPSUM L L C — GreenGlass Type X, Type DGG.
2E. Gypsum Board* — (As an alternate to Items 2 through 2D) — 5/8 in. thick, 4 ft. wide, paper surfaced applied vertically only and secured as described in Item 2.
GEORGIA-PACIFIC GYPSUM L L C — Type X ComfortGuard Sound Deadening Gypsum Board.
2F. Gypsum Board* — (As an alternate to Items 2 through 2E) - Installed as described in Item 2. 5/8 in. thick, 4 ft. wide, paper surfaced, applied vertically only and fastened to the studs and plates with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 1/4 in. diam heads, 7 in. OC. Not for use with item #6.
NATIONAL GYPSUM CO — Type SBWB
2G. Gypsum Board* — (As an alternate to Items 2 through 2F) — Nominal 5/8 in. thick, 4 ft wide panels, applied vertically and secured as described in Item 2.
PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Types QuietRock ES.
2H. Gypsum Board* — (As an alternate to Items 2 through 2G) — Installed as described in Item 2. 5/8 in. thick, 4 ft. wide, paper surfaced, applied vertically or horizontally fastened to the studs and plates with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a max 12 in. OC.
CERTAINTEED GYPSUM INC — Type SilentFX
2I. Wall and Partition Facings and Accessories* — (As an alternate to Items 2 through 2H) — Nominal 5/8 in. thick, 4 ft wide panels, applied vertically and secured as described in Item 2.
PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type QuietRock 527.
2J. Gypsum Board* — (As an alternate to 5/8 in. Type FSW in Item 2) — 2 layers nom. 5/16 in. thick gypsum panels applied vertically or horizontally. Horizontal joints on the same side need not be staggered. Inner layer attached with fasteners, as described in item 2, spaced 24 in. OC. Outer layer attached per Item 2.
NATIONAL GYPSUM CO — Type FSW.
3. Joints and Nailheads — Gypsum board joints of outer layer covered with tape and joint compound. Nail heads of outer layer covered with joint compound. As an alternate, nom 3/32 in. thick gypsum veneer plaster may be applied to the entire surface of Classified veneer baseboard with joints reinforced with paper tape.
4. Sheathing — (Optional) — Septum may be sheathed with min 7/16 in. thick wood structural panels min grade "C-D" or "Sheathing" or min 1/2 in. thick Mineral and Fiber Boards*.
See Mineral and Fiber Boards (CERZ) category for names of Classified companies.
5. Batts and Blankets* — 3-1/2 in. max thickness glass or mineral fiber batt insulation. Optional when sheathing (Item 4) is used on both halves of wall.
See Batts and Blankets (BZJZ) category for list of Classified companies.
5A. Fiber, Sprayed* — As an alternate to Batts and Blankets (Item 5) — Spray applied cellulose material. The fiber is applied with water to completely fill the enclosed cavity in accordance with the application instructions supplied with the product with a nominal dry density of 2.7 lb/ft3. Alternate Application Method: The fiber is applied without water or adhesive at a nominal dry density of 3.5 lb/ft3, in accordance with the application instructions supplied with the product.
Applegate Greenfiber Acquisition LLC — Insulmax and SANCTUARY for use with wet or dry application.
5B. Fiber, Sprayed* — As an alternate to Batts and Blankets (Item 5) when Sheathing (Item 4) is used on both halves of wall - Spray applied cellulose insulation material. The fiber is applied with water to interior surfaces in accordance with the application instructions supplied with the product. Applied to completely fill the enclosed cavity. Minimum dry density of 4.3 pounds per cubic ft.
NU-WOOL CO INC — Cellulose Insulation
5C. Batts and Blankets* — (Required for use with Wall and Partition Facings and Accessories, Item 2A. Use of Sheathing, Item 4, does not nullify requirement of Item 5C for use with Item 2A) — Glass fiber insulation, nom 3-1/2 in. thick, min. density of 0.80 pcf, with a flame spread of 25 or less and a smoke developed of 50 or less, friction-fitted to completely fill the stud cavities. See Batts and Blankets Category (BKNV) for names of manufacturers.
5D. Fiber, Sprayed* — As an alternate to Batts and Blankets (Item 5) and Item 5A when Sheathing (Item 4) is used on both halves of wall - Spray applied cellulose fiber. The fiber is applied with water to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. The minimum dry density shall be 4.30 lbs/ft3.
INTERNATIONAL CELLULOSE CORP — Celbar-RL

FIRE RATING FOR 1 HOUR BEARING WALL RATING
U.L. DESIGN NO. U341

5E. Fiber, Sprayed* — As an alternate to Batts and Blankets (Item 5) - Spray-applied cellulose material. The fiber is applied with water to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. To facilitate the installation of the material, any thin, woven or non-woven netting may be attached by any means possible to the outer face the studs. The material shall reach equilibrium moisture content before the installation of materials on either face of the studs. The minimum dry density shall be 5.79 lbs/ft3.
Applegate Greenfiber Acquisition LLC— Applegate Advanced Stabilized Cellulose Insulation
6. Steel Framing Members* — (Optional, Not Shown) — Furring channels and Steel Framing Members as described below:
A. Furring Channels — Formed of No. 25 MSG galv steel. 2-9/16 in. or 2-23/32 in. wide by 7/8 in. deep, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping #6 framing screws, min. 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Wallboard attached to furring channels as described in Item 2.
B. Steel Framing Members* — Used to attach furring channels (Item a) to studs (Item 1) . Clips spaced 48 in. OC., and secured to studs with No. 8 x 2-1/2 in. coarse drywall screw through the center grommet. Furring channels are friction fitted into clips. RSIC-1 clip for use with 2-9/16 in. wide furring channels. RSIC-1 (2.75) clip for use with 2-23/32 in. wide furring channels.
PAC INTERNATIONAL L L C — Types RSIC-1, RSIC-1 (2.75).
6A. Steel Framing Members* — (Optional, Not Shown, As an alternate to Item 6) — Furring channels and Steel Framing Members as described below:
a. Furring Channels — Formed of No. 25 MSG galv steel. 2-3/8 in. wide by 7/8 in. deep, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping #6 framing screws, min. 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Gypsum board attached to furring channels as described in Item 2.
b. Steel Framing Members* — Used to attach furring channels (Item a) to studs. Clips spaced 48 in. OC. Genie clips secured to studs with No. 8 x 1-1/2 in. coarse drywall screw through the center hole. Furring channels are friction fitted into clips.
PLITEQ INC — Type Genie Clip
6B. Steel Framing Members* — (Optional, Not Shown, As an alternate to Item 6) — Furring channels and Steel Framing Members as described below:
a. Furring Channels — Formed of No. 25 MSG galv steel. Spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 AWG galvanized steel wire. Gypsum board attached to furring channels as described in Item 2.
b. Steel Framing Members* — Used to attach furring channels (Item 6Ba) to studs. Clips spaced 48 in. OC., and secured to studs with 2 in. coarse drywall screw with 1 in. diam washer through the center hole. Furring channels are friction fitted into clips.
STUDCO BUILDING SYSTEMS — RESILMOUNT Sound Isolation Clips - Type A237R
6C. Steel Framing Members* — (Optional, Not Shown, As an alternate to Item 6) — Furring channels and Steel Framing Members as described below:
A. Furring Channels — Formed of No. 25 MSG galv steel. Spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item 6Cb. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 AWG galvanized steel wire. Gypsum board attached to furring channels as described in Item 2.
B. Steel Framing Members* — Used to attach furring channels (Item 6CA) to studs. Clips spaced 48 in. OC., and secured to studs with No. 8 x 2-1/2 in. coarse drywall screw through the center hole. Furring channels are friction fitted into clips.
REGUPOL AMERICA — Type SonusClip
6D. Steel Framing Members* — (Optional, Not Shown, As an alternate to Item 6) — Resilient channels and Steel Framing Members as described below:
a. Resilient Channels — Formed of No. 25 MSG galv steel, spaced 24 in. OC, and perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels overlapped 6 in. and secured in place with two No. 8 15 x 1/2 in. Philips Modified Truss screws spaced 2-1/2 in. from the center of the overlap. Gypsum board attached to resilient channels as described in Item 2.
b. Steel Framing Members* — Used to attach resilient channels (Item 6Da) to studs. Clips spaced 48 in. OC., and secured to studs with No. 8 x 2-1/2 in. coarse drywall screw through the center hole. Resilient channels are secured to clips with one No. 10 x 1/2 in. pan-head self-drilling screw.
KEENE BUILDING PRODUCTS CO INC — Type RC+ Assurance Clip
6E. Steel Framing Members* — (Optional, Not Shown) — Resilient channels and Steel Framing Members as described below:
a. Resilient Channels —Formed of No. 25 MSG galv steel, spaced 24 in. OC, and perpendicular to studs. Channels secured to studs as described in Item b. Gypsum board attached to resilient channels as described in Item 2.
b. Steel Framing Members* - Used to attach resilient channels to wall studs. A resilient sound isolation accessory shall be used at each attachment point of the resilient channels to the studs. Channel ends butted and centered under the structural members and attached with one accessory at each end. Additional accessories used to hold resilient channels that support the gypsum board end joints. The accessory envelops the mounting edge of the resilient channel. The accessory and resilient channel are fastened to the studs with the screws supplied with the accessory and per the accessory manufacturer's installation instructions.
PAC INTERNATIONAL L L C — Type RC-1 Boost
6F Steel Framing Members* — (Optional, Not Shown, As an alternate to Item 6) — Furring channels and Steel Framing Members as described below:
a Furring Channels — Formed of No. 25 MSG galv steel. 2-23/32 in. wide by 7/8 in. deep, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping #6 framing screws, min. 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Gypsum board attached to furring channels as described in Item 2.
b Steel Framing Members* — Used to attach furring channels (Item 6Fa) to studs. Clips spaced maximum 48 in. OC. Clips secured to studs with No. 8 x 2-1/2 in. coarse drywall screw through the center grommet. Furring channels are friction fitted into clips.
CLARKDIETRICH BUILDING SYSTEMS — Type ClarkDietrich Sound Clip
7. Wall and Partition Facings and Accessories* — (Optional, Not shown) — Nominal 1/2 in. thick, 4 ft wide panels, for optional use as an additional layer on one or both sides of the assembly. Panels attached in accordance with manufacturer's recommendations. When the QR-500 or QR-510 panel is installed between the wood framing and the UL Classified gypsum board, the required UL Classified gypsum board layer(s) is/are to be installed as indicated as to fastener type and spacing, except that the required fastener length shall be increased by a minimum of 1/2 in. Not evaluated or intended as a substitute for the required layer(s) of UL Classified Gypsum Board.
PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type QuietRock QR-500 and QR-510
8. Mineral and Fiber Board* — ((Optional, Not Shown) — For optional use as an additional layer on one or both sides of wall. Nom 1/2 in. thick, 4 ft wide with long dimension parallel and centered over studs. Attached to framing as described in Item 2. The required UL Classified gypsum board layer(s) is/are to be installed as indicated as to fastener type and spacing, except that the required fastener length shall be increased by a minimum of 1/2 in. Not evaluated or intended as a substitute for the required layer(s) of UL Classified Gypsum Board.
HOMASOTE CO — Homasote Type 440-32
9. Non-Bearing Wall Partition Intersection — (Optional) — Two nominal 2 by 4 in. stud or nominal 2 by 6 in. stud nailed together with two 3in. long 10d nails spaced a max. 16 in. OC. vertically and fastened to one side of the minimum 2 by 4 in. stud with 3 in. long 10d nails spaced a max 16 in. OC. vertically. Intersection between partition wood studs to be flush with the 2 by 4 in. studs. The wall partition wood studs are to be framed by with a second 2 by 4 in. wood stud fastened with 3 in. long 10d nails spaced a max. 16 in. OC. vertically. Maximum one non-bearing wall partition intersection per stud cavity. Non-bearing wall partition stud depth shall be at a minimum equal to the depth of the bearing wall.
(Optional, Not Shown) Alternate Construction For Use On One Side Of The Wall.
10. Mineral and Fiber Board* — For use with Items 10A-10D) —Nom 1/2 in. thick, 4 ft wide with long dimension parallel and centered over studs. Attached to framing with minimum 1-3/8 in. long ring shanked nails or 1-1/4 in. long Type W steel screws, spaced 12 in. OC along board edges and 24 in. OC in field of board along intermediate framing. Not evaluated or intended as a substitute for the required layer(s) of UL Classified Gypsum Board.
HOMASOTE CO — Homasote Type 440-32
10A. Glass Fiber Insulation — (For use with Item 10) — 3-1/2 in. thick glass fiber batts bearing the UL Classification Marking as to Surface Burning and/or Fire Resistance, placed to fill the interior of the wall. See Batts and Blankets (BKNV or BZJZ) categories for names of Classified companies.
10B. Batts and Blankets* — (As an alternate to Item 10B, For use with Item 10), 3 in. thick mineral wool batts, placed to fill interior of wall, attached to the 3-1/2 in. face of the studs with staples placed 24 in. OC.
THERMAFIBER/OWENS CORNING — Type SAFB, SAFB FF
10C. Adhesive — (For use with Item 10) — Construction grade adhesive applied in vertical, serpentine, nominal 3/8 in. wide beads down the length of both vertical edges of Mineral and Fiber Board (Item 14A).
10D. Gypsum Board* — (For use with Item 10) — 5/8 in. thick, 4 ft wide, applied vertically over Mineral and Fiber Board (Item 14A) with vertical joints located anywhere over stud cavities. Secured to mineral and fiber boards with 1-1/2 in. Type G Screws spaced 8 in. OC along edges of each vertical joint and 12 in. OC in intermediate field of the Mineral and Fiber Board (Item 10). Secured to outermost studs and bearing plates with 2 in. long Type S screws spaced 8 in. OC. Gypsum Board joints covered with paper tape and joint compound. Screw heads covered with joint compound. Finish Rating 30 Min.
AMERICAN GYPSUM CO — Type AG-C
CERTAINTEED GYPSUM INC — Type C
GEORGIA-PACIFIC GYPSUM L L C — Types 5, DAPC, TG-C
NATIONAL GYPSUM CO — Types FSK-C, FSW-C
PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type PG-C
PANEL REY S A — Type PRC
THAI GYPSUM PRODUCTS PCL — Type C
UNITED STATES GYPSUM CO —Types C, IP-X2, IPC-AR
USG BORAL DRYWALL SFZ LLC — Type C
USG MEXICO S A DE C V — Types C, IP-X2, IPC-AR

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.
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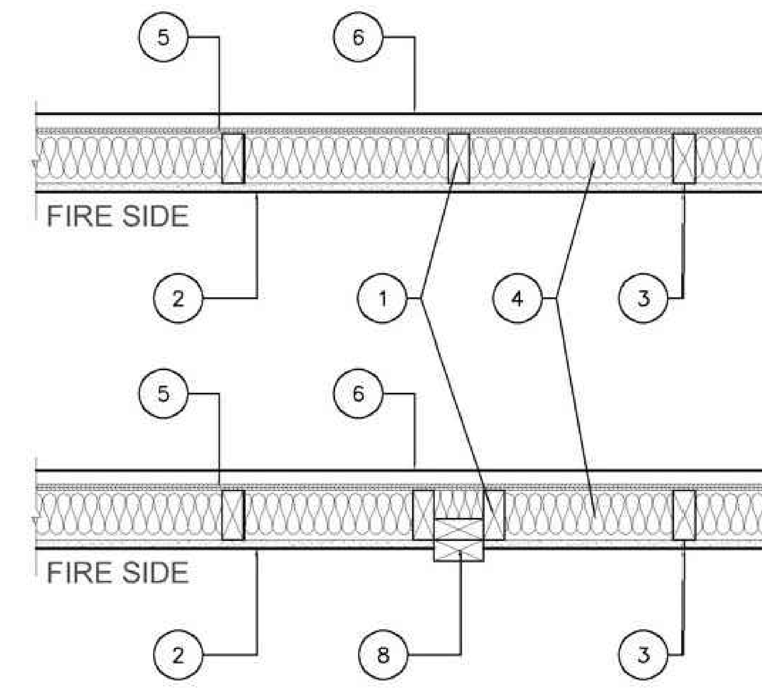
FIRE RATING FOR 1 HOUR BEARING WALL RATING
U.L. DESIGN NO. U341

Design No. U356
November 14, 2025

Bearing Wall Rating - 1 Hr Rating Exposed to Fire on Interior Face Only
Bearing Wall Rating — 1 Hr Rating Exposed to Fire on Exterior Face (See Item 6E)
Finish Rating — 23 Min or 25 Min (See Item 2)
This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be used — See Guide BXUV or BXUV7




* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

1. Wood Studs — Nom 2 by 4 in. spaced 16 in. OC with two 2 by 4 in. top and one 2 by 4 in. bottom plates. Studs laterally-braced by wood structural panel sheathing (Item 5). When Mineral and Fiber Boards* (Item 5A) are considered as bracing for the studs, the load is restricted to 76% of allowable axial load. Walls effectively fire stopped at top and bottom of wall.
2. Gypsum Board* — Any 5/8 in. thick UL Classified Gypsum Board that is eligible for use in Design Nos. L501, G512 or U305. Nom 5/8 in. thick, 4 ft wide, applied vertically and nailed to studs and bearing plates 7 in. OC with 6d cement-coated nails, 1-7/8 in. long with 1/4 in. diam head.
When Item Steel Framing Members* (Item 7 or any alternate clips), is used, gypsum panels attached to furring channels with 1 in. long Type S bugle-head steel screws spaced 12 in. OC.
When Item 7A Steel Framing Members*, is used, two layers of gypsum panels attached to furring channels. Base layer attached to furring channels with 1 in. long Type S bugle-head steel screws spaced 12 in. OC. Face layer attached to furring channels with 1-5/8 in. long Type S bugle-head steel screws spaced 12 in. OC. All joints in face layers staggered with joints in base layers.
AMERICAN GYPSUM CO (View Classification) — CKNX.R14196
BEIJING NEW BUILDING MATERIALS PUBLIC LTD CO (View Classification) — CKNX.R19374
CABOT MANUFACTURING ULC (View Classification) — CKNX.R25370
CERTAINTEED GYPSUM INC (View Classification) — CKNX.R3660
CGC INC (View Classification) — CKNX.R19751
GEORGIA-PACIFIC GYPSUM L L C (View Classification) — CKNX.R2717
NATIONAL GYPSUM CO (View Classification) — CKNX.R3501
PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM (View Classification) — CKNX.R7094
PANEL REY S A (View Classification) — CKNX.R21796
SIAM GYPSUM INDUSTRY (SARABURI) CO LTD (View Classification) — CKNX.R19262
THAI GYPSUM PRODUCTS PCL (View Classification) — CKNX.R27517
UNITED STATES GYPSUM CO (View Classification) — CKNX.R1319
USG BORAL DRYWALL SFZ LLC (View Classification) — CKNX.R38438
USG MEXICO S A DE C V (View Classification) — CKNX.R16089
2A. Gypsum Board* — (As an alternate to Item 2, Not Shown) — Any 5/8 in. thick 4 ft wide gypsum panels that are eligible for use in Design Nos. L501, G512 or U305, supplied by the Classified Companies listed below shown in the Gypsum Board* (CKNX) category. Applied vertically and attached to studs and bearing plates with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a max 8 in. OC, with last screw 1 in. from edge of board.
CGC INC
UNITED STATES GYPSUM CO
USG BORAL DRYWALL SFZ LLC
USG MEXICO S A DE C V
2B. Gypsum Board* — (As an alternate to Item 2, Not Shown) — 5/8 in. thick 4 ft wide gypsum panels applied vertically and attached to studs and bearing plates with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a max 8 in. OC, with last screw 1 in. from edge of board.
AMERICAN GYPSUM CO — Types AGX-1, M-Glass, AG-C, LightRoc
CABOT MANUFACTURING ULC — Type X, 5/8 Type X, Type Blueglass Exterior Sheathing
CERTAINTEED GYPSUM INC — Type C, Type X-1
GEORGIA-PACIFIC GYPSUM L L C — Types X, Veneer Plaster Base-Type X, Water Rated-Type X, Sheathing Type-X, Soffit-Type X, Type X ComfortGuard Sound Deadening Gypsum Board.
PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Types PG-11, PGS-WRS, PGI.
THAI GYPSUM PRODUCTS PCL — Type C or Type X
2C. Gypsum Board* — (As an alternate to Item 2, Not Shown) — For Use with Item 5A only - 5/8 in. thick 4 ft wide gypsum panels applied horizontally and attached to studs and bearing plates with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a max 8 in. OC, with last screws 1 in.and 4 in. from edges of board. Finish Rating is 25 min.
CABOT MANUFACTURING ULC — 5/8 Type X, Type Blueglass Exterior Sheathing
GEORGIA-PACIFIC GYPSUM L L C — Type X, Veneer Plaster Base-Type X, Water Rated-Type X, Sheathing Type-X, Soffit-Type X
PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Types PG-11, PGS-WRS, PGI
2D. Gypsum Board* — (As an alternate to Item 2) — Not to be used with item 7. 5/8 in. thick, 4 ft. wide, paper surfaced, applied vertically only and fastened to the studs and plates with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 1/4 in. diam heads, 7 in. OC.
NATIONAL GYPSUM CO — Type SBWB
2E Gypsum Board* — (As an alternate to Items 2 through 2D) — Nominal 5/8 in. thick, 4 ft wide panels, secured as described in Item 2.
PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type QuietRock ES.
2F. Gypsum Board* — (As an alternate to Item 2) — Not to be used with item 7. 5/8 in. thick, 4 ft. wide, paper surfaced, applied vertically or horizontally and fastened to the studs and plates with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a max 8 in. OC, with last screw 1 in. from edge of board.
CERTAINTEED GYPSUM INC — Type SilentFX
2G. Wall and Partition Facings and Accessories* — (As an alternate to Items 2 through 2F) — Nominal 5/8 in. thick, 4 ft wide panels, secured as described in Item 2.
PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type QuietRock 527.
2I. Gypsum Board* — (As an alternate to Item 2) — 5/8 in. thick gypsum panels, with beveled, square, or tapered edges, applied either horizontally or vertically. Gypsum panels fastened to framing with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a max 8 in. OC, with last screw 1 in. from edge of board. When used in widths of other than 48 in., gypsum boards are to be installed horizontally.
AMERICAN GYPSUM CO — Types AGX-1 (finish rating 25 min.), M-Glass (finish rating 25 min.), AG-C (finish rating 25 min.), LightRoc (finish rating 25 min.)
NATIONAL GYPSUM CO — Type FSK, Type FSK-G, Type FSW, Type FSW-3, Type FSW-5, Type FSW-G, Type FSK-C, Type FSW-C, Type FSMR-C, Type FSW-6, Type FSL
2J. Gypsum Board* — (As an alternate to Item 2) - 5/8 in. thick gypsum panels, with beveled, square, or tapered edges, applied either horizontally or vertically. Gypsum panels fastened to framing with 1-1/4 in. long Type W coarse thread steel screws spaced a max 8 in. OC with the last screw 1 in. from edge of board. When used in widths other than 48 in., gypsum boards are to be installed horizontally.
CERTAINTEED GYPSUM INC — Type C, Type X-1(finish rating 26 min), Type EGRG or GlasRoc or GlasRoc Sheathing (finish rating 23 min)
3. Joints and Fastener Heads — (Not Shown) — Gypsum board joints covered with tape and joint compound. Fastener heads covered with joint compound.
4. Batts and Blankets* — Mineral fiber or glass fiber insulation, 3-1/2 in. thick, pressure fit to fill wall cavities between studs and plates. Mineral fiber insulation to be unfaced and to have a min density of 3 pcf. Glass fiber insulation to be faced with aluminum foil or kraft paper and to have a min density of 0.9 pcf (min R-13 thermal insulation rating).
See Batts and Blankets* (BKNV) Category in the Building Materials Directory and Batts and Blankets* (BZJZ) Category in the Fire Resistance Directory for names of Classified Companies.
4A. Fiber, Sprayed* — As an alternate to Batts and Blankets (Item 4) — Spray applied cellulose material. The fiber is applied with water to completely fill the enclosed cavity in accordance with the application instructions supplied with the product with a nominal dry density of 2.7 lb/ft3. Alternate Application Method: The fiber is applied without water or adhesive at a nominal dry density of 3.5 lb/ft3, in accordance with the application instructions supplied with the product.
Applegate Greenfiber Acquisition LLC — Insulmax and SANCTUARY are to be used for dry application only.
4B. Fiber, Sprayed* — As an alternate to Item 4 and 4A — Spray applied cellulose material. The fiber is applied with water to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. Nominal dry density of 4.58 lb/ft 3.
NU-WOOL CO INC — Cellulose Insulation
4C. Fiber, Sprayed* — As an alternate to Batts and Blankets (Item 4) — Spray applied cellulose fiber. The fiber is applied with water to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. The minimum dry density shall be 4.30 lbs/ft3.

FIRE RATING FOR 1 HOUR BEARING WALL RATING
U.L. DESIGN NO. U356

INTERNATIONAL CELLULOSE CORP — Celbar-RL
4D. Fiber, Sprayed* — As an alternate to Batts and Blankets (Item 4) — Spray applied, granulated mineral fiber material. The fiber is applied with adhesive, at a minimum density of 4.0 pcf, to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. See Fiber, Sprayed (CCAZ).
AMERICAN ROCKWOOL MANUFACTURING, LLC — Type Rockwool Premium Plus
5. Wood Structural Panel Sheathing — Min 7/16 in. thick, 4 ft wide wood structural panels, min grade "C-D" or "Sheathing". Installed with long dimension of sheet (strength axis) or face grain of plywood parallel with or perpendicular to studs. Vertical joints centered on studs. Horizontal joints backed with nom 2 by 4 in. wood blocking. Attached to studs on exterior side of wall with 6d cement coated box nails spaced 6 in. OC at perimeter of panels and 12 in. OC along interior studs.
5A. Mineral and Fiber Boards* — As an alternate to Item 5 - Min 1/2 in. thick, 4 ft wide sheathing, installed vertically to studs. Vertical joints centered on studs. Horizontal joints backed with nom 2 by 4 in. wood blocking. Attached to studs on exterior side of wall with 1-1/2 in. long galvanized roofing nails spaced 6 in. OC at perimeter of panels and 12 in. OC along interior studs. As an option a weather resistive barrier may be applied over the Mineral and Fiber Boards.
6. Exterior Facings — Installed in accordance with the manufacturer's installation instructions. One of the following exterior facings is to be applied over the sheathing:
A. Vinyl Siding — Molded Plastic* — Contoured rigid vinyl siding having a flame spread value of 20 or less.
See Molded Plastic (BTAT) category in the Building Materials Directory for names of manufacturers.
B. Particle Board Siding — Hardboard exterior sidings including patterned panel or lap siding.
C. Wood Structural Panel or Lap Siding — APA Rated Siding, Exterior, plywood, OSB or composite panels with veneer faces and structural wood core, per PS 1 or APA Standard PRP-108, including textured, rough sawn, medium density overlay, brushed, grooved and lap siding.
D. Cementitious Stucco — Portland cement or synthetic stucco systems with self-furring metal lath or adhesive base coat. Thickness from 3/8 to 3/4 in., depending on system.
E. Brick Veneer — Any type on nom 4 in. wide brick veneer. When brick veneer is used, the rating is applicable with exposure on either face. Brick veneer fastened with corrugated metal wall ties attached over sheathing to wood studs with 8d nail per tie: ties spaced not more than each sixth course of brick and max 32 in. OC horizontally. One in. air space provided between brick veneer and sheathing.
F. Exterior Insulation and Finish System (EIFS) — Nom 1 in. Foamed Plastic* insulation bearing the UL Classification Marking, attached over sheathing and finished with coating system, or Portland cement or synthetic stucco systems, in accordance with manufacturer's instructions. See Foamed Plastic (BRYX and CCVW) categories for names of Classified companies.
G. Siding — Aluminum or steel siding attached over sheathing to studs.
H. Fiber-Cement Siding — Fiber-cement exterior sidings including smooth and patterned panel or lap siding.
I. Wall and Partition Facings and Accessories* — Stone veneer is mortar bonded to a lath, scratch coat and water resistant barrier applied to sheathing, installed in accordance with the manufacturers installation instructions, and meeting the requirements of local code agencies.
ELDORADO STONE OPERATIONS L L C — Type Eldorado Stone
J. Cementitious Backer Units — 1/2 in. or 5/8 in., min. 32 in. wide.- Applied vertically or horizontally with vertical joints centered over studs. Fastened to studs and runners with cement board screws of adequate length to penetrate stud by a minimum 3/4 in., spaced a max of 8 in. OC. Horizontal joints need not be backed by framing. When Cementitious Backer Units are used, the rating is applicable with exposure on either face. Cementitious Backer Units for use as substrate for exterior finishes such as ceramic tile, slate, marble, natural stone, manufactured stone, thin brick, or Portland cement or synthetic stucco.
NATIONAL GYPSUM CO — Type PermaBase
K. Building Units – 1 in., 2 in. or 3 in. thick, 4 ft. wide composite exterior cement backer board with rigid insulation, finished with ceramic tile, marble, natural stone, manufactured stone, thin brick, Portland cement or synthetic stucco.
NATIONAL GYPSUM CO – Type PBCI
6A. Building Units* — As an alternate to Exterior Facing Item 6 — Insulated steel panels, 12 through 42 in. wide. Attached over sheathing through retainer clips to studs or support steel with No. 14 hex head self-tapping screws located at each joint in the concealed lip of the units and spaced in accordance with the structural design requirements.
KINGSPAN INSULATED PANELS INC — Types Designwall 4000, KS Series/Optimo, Designwall 2000R, Designwall 2000R-459 and Designwall 2000
6B. Building Units* — As an alternate to Exterior Facing Item 6 — Insulated steel panels 24, 30 or 42 in. wide. Attached through retainer clips to studs with No. 14 hex head screws located at each joint in the concealed lip of the units and spaced in accordance with the structural design requirements.
CENTRIA, A NUCOR COMPANY — Types Formawall Dimension Series, Formawall Dimension Series Graphix.
7. Steel Framing Members* — (Optional, Not Shown) — Furring Channels and Steel Framing Members as described below:
a. Furring Channels — Formed of No. 25 MSG galv steel. 2-9/16 in. or 2-23/32 in. wide by 7/8 in. deep, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping #6 framing screws, min. 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Gypsum board attached to furring channels as described in Item 2.
b. Steel Framing Members* — Used to attach furring channels (Item 7A) to studs. Clips spaced 48 in. OC., and secured to studs with No. 8 x 2-1/2 in. coarse drywall screw through the center grommet. Furring channels are friction fitted into clips. RSIC-1 clip for use with 2-9/16 in. wide furring channels. RSIC-1 (2.75) clip for use with 2-23/32 in. wide furring channels.
PAC INTERNATIONAL L L C — Types RSIC-1, RSIC-1 (2.75).
7A. Steel Framing Members* — (Optional, Not Shown, As an alternate to Item 7) — Furring channels and Steel Framing Members as described below:
a. Furring Channels — Formed of No. 25 MSG galv steel, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. Two layers of gypsum board attached to furring channels as described in Item 2.
b. Steel Framing Members* — Used to attach furring channels (Item 7Aa) to interior side of studs. Clips spaced 48 in. OC., and secured to studs with two No. 8 x 2-1/2 in. coarse drywall screws, one through the hole at each end of the clip. Furring channels are friction fitted into clips.
KINETICS NOISE CONTROL INC — Type Isomax.
7B. Steel Framing Members* — (Optional, Not Shown, As an alternate to Item 7) — Furring channels and Steel Framing Members as described below:
a. Furring Channels — Formed of No. 25 MSG galv steel. 2-3/8 in. wide by 7/8 in. deep, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping #6 framing screws, min. 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Gypsum board attached to furring channels as described in Item 2.
b. Steel Framing Members* — Used to attach furring channels (Item a) to studs. Clips spaced 48 in. OC. Genie clips secured to studs with No. 8 x 1-1/2 in. coarse drywall screw through the center hole. Furring channels are friction fitted into clips.
PLITEQ INC — Type Genie Clip
7C. Steel Framing Members* — (Optional, Not Shown, As an alternate to Item 7) — Furring channels and Steel Framing Members as described below:
a. Furring Channels — Formed of No. 25 MSG galv steel. Spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 AWG galvanized steel wire.Gypsum board attached to furring channels as described in Item 2.
b. Steel Framing Members* — Used to attach furring channels (Item 7Ca) to studs. Clips spaced 48 in. OC., and secured to studs with 2 in. coarse drywall screw with 1 in. diam washer through the center hole. Furring channels are friction fitted into clips.
STUDCO BUILDING SYSTEMS — RESILMOUNT Sound Isolation Clips - Type A237R
7D. Steel Framing Members* — (Optional, Not Shown, As an alternate to Item 7) — Furring channels and Steel Framing Members as described below:
a. Furring Channels — Formed of No. 25 MSG galv steel. Spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item 7Db. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 AWG galvanized steel wire. Gypsum board attached to furring channels as described in Item 2.
b. Steel Framing Members* — Used to attach furring channels (Item 7Da) to studs. Clips spaced 48 in. OC., and secured to studs with No. 8 x 2-1/2 in. coarse drywall screw through the center hole. Furring channels are friction fitted into clips.
REGUPOL AMERICA — Type SonusClip
7E. Steel Framing Members* — (Optional, Not Shown, As an alternate to Item 7) — Resilient channels and Steel Framing Members as described below:
a. Resilient Channels — Formed of No. 25 MSG galv steel, spaced 24 in. OC, and perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels overlapped 6 in. and secured in place with two No. 8 15 x 1/2 in. Philips Modified Truss screws spaced 2-1/2 in. from the center of the overlap. Gypsum board attached to resilient channels as described in Item 2.
b. Steel Framing Members* — Used to attach resilient channels (Item 7Ea) to studs. Clips spaced 48 in. OC., and secured to studs with No. 8 x 2-1/2 in. coarse drywall screw through the center hole. Resilient channels are secured to clips with one No. 10 x 1/2 in. pan-head self-drilling screw.
KEENE BUILDING PRODUCTS CO INC — Type RC+ Assurance Clip
7F Steel Framing Members* — (Optional, Not Shown, As an alternate to Item 7) — Furring channels and Steel Framing Members as described below:
a Furring Channels — Formed of No. 25 MSG galv steel. 2-23/32 in. wide by 7/8 in. deep, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping #6 framing screws, min. 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Gypsum board attached to furring channels as described in Item 2.
b Steel Framing Members* — Used to attach furring channels (Item 7Fa) to studs. Clips spaced maximum 48 in. OC. Clips secured to studs with No. 8 x 2-1/2 in. coarse drywall screw through the center grommet. Furring channels are friction fitted into clips.
CLARKDIETRICH BUILDING SYSTEMS — Type ClarkDietrich Sound Clip
8. Non-Bearing Wall Partition Intersection — (Optional) — Two nominal 2 by 4 in. stud or nominal 2 by 6 in. stud nailed together with two 3in. long 10d nails spaced a max. 16 in. OC. vertically and fastened to one side of the minimum 2 by 4 in. stud with 3 in. long 10d nails spaced a max 16 in. OC. vertically. Intersection between partition wood studs to be flush with the 2 by 4 in. studs. The wall partition wood studs are to be framed by with a second 2 by 4 in. wood stud fastened with 3 in. long 10d nails spaced a max. 16 in. OC. vertically. Maximum one non-bearing wall partition intersection per stud cavity. Non-bearing wall partition stud depth shall be at a minimum equal to the depth of the bearing wall.
* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.
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FIRE RATING FOR 1 HOUR BEARING WALL RATING
U.L. DESIGN NO. U356

KONTOGIANNIS
& ASSOCIATES

ARCHITECTURE
PLANNING
DESIGN

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PROJECT:

TANNER'S
CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:
FIRE RESISTANCE
RATINGS

DATE: 06/26/2026
REVISED:

GEORGE J. KONTOGIANNIS REGISTERED No. AR00034309 STATE OF INDIANA ARCHITECT

GEORGE J. KONTOGIANNIS, LICENSE #AR00034309
EXPIRATION DATE 12/31/2027

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- [ ] SUBMISSION SET 06/27/2025
- [ ] ZONING SET 05/07/2026
- [x] BID SET 06/26/2026
- [ ] PERMIT SET
- [ ] CONSTRUCTION SET

FR-3

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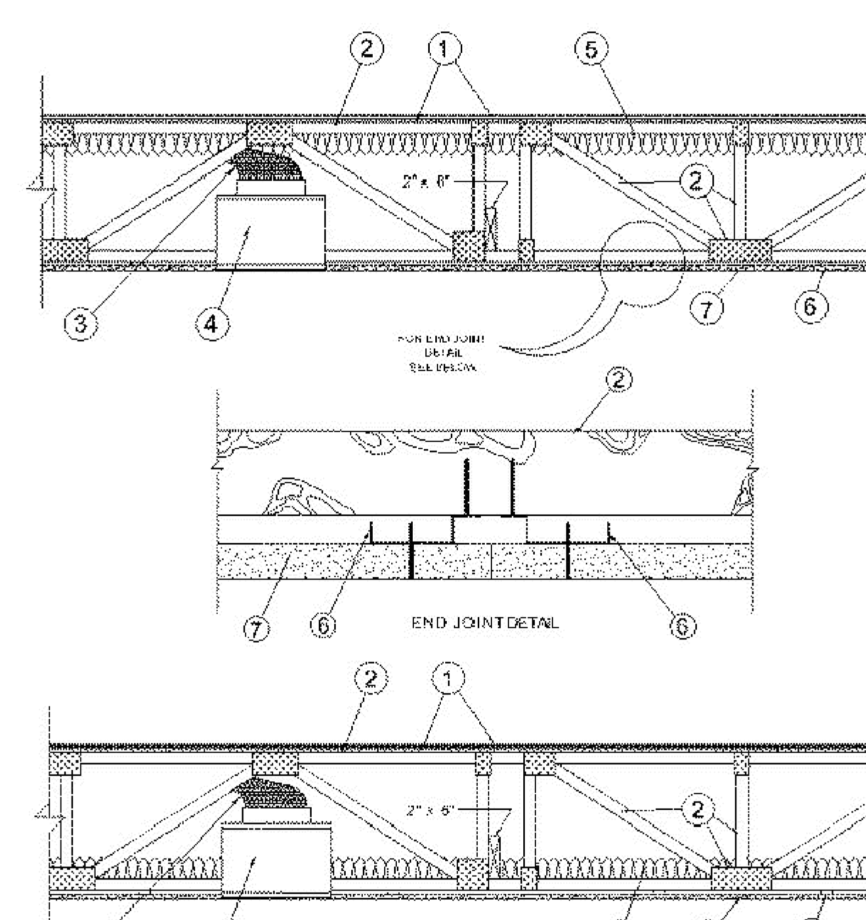
Design No. L563

November 13, 2025

Unrestrained Assembly Rating - 1 Hr

Finish Rating - 25 Min (See Items 5 or 5A and 7), 20 Min. (See Items 6E and 7A)

This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be used — See Guide BXUV or BXUV7




* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

1. Flooring System — The flooring system shall consist of one of the following:

System No. 1

Subflooring — Nom 23/32 in. thick wood structural panels installed perpendicular to trusses with end joints staggered. Plywood panels secured to trusses with construction adhesive and No. 6d ringed shank nails spaced 12 in. OC along each truss. TetraGRIP™ nails measuring 2-3/8 in. long, 0.113 in. diameter, 0.272 in. round head, and helically threaded shank with barbed features on the helix meeting ASTM F1667 and having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.

Vapor Barrier - (Optional) — Nom 0.030 in. thick commercial asphalt saturated felt.

Finish Flooring — Min 1 by 4 in. T & G lumber fastened diagonally to trusses, or min 15/32 in. thick wood structural panels, min grade "Underlayment" or "Single Floor". Face grain of plywood or strength axis of panel to be perpendicular to trusses with joints staggered.

System No. 2

Subflooring — Min 23/32 in. thick T & G wood structural panels installed perpendicular to trusses with end joints staggered 4 ft. Plywood or nonveneer APA rated panels secured to trusses with construction adhesive and No. 6d ringed shank nails spaced 12 in. OC along each truss. TetraGRIP™ nails measuring 2-3/8 in. long, 0.113 in. diameter, 0.272 in. round head, and helically threaded shank with barbed features on the helix meeting ASTM F1667 and having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.

Floor Mat Materials* - (Optional)— Floor mat material nom 1/8 in. (3 mm) thick loose laid over the subfloor. Floor topping thickness shall be a min of 3/4 in. (19 mm)

HACKER INDUSTRIES INC — FIRM-FILL SCM 125

Alternate Floor Mat Materials - (Optional)— Floor mat material nom 1/4 in. (6 mm) thick loose laid over the subfloor. Floor topping thickness shall be a min of 1 in. (25 mm)

HACKER INDUSTRIES INC — Types FIRM-FILL SCM 250 and FIRM-FILL SCM 250+

Alternate Floor Mat Materials - (Optional)— Floor mat material nom 3/8 in. (10 mm) thick loose laid over the subfloor. Floor topping thickness shall be a min of 1-1/4 in. (32 mm)

HACKER INDUSTRIES INC — Types FIRM-FILL SCM 400 and FIRM-FILL SCM 400+

Alternate Floor Mat Materials - (Optional) — Floor mat material nom 3/4 in. (19 mm) thick loose laid over the subfloor. Floor topping thickness shall be a min of 1-1/2 in. (38 mm

HACKER INDUSTRIES INC — Types FIRM-FILL SCM 750 and FIRM-FILL SCM 750+

Alternate Floor Mat Materials - (Optional) — Floor mat material nom 5/64 in. (2 mm) thick adhered to subfloor with Hacker Floor Primer. Primer to be applied to the surface of the mat prior to the placement of a min 1 in. of floor-topping mixture.

HACKER INDUSTRIES INC — Type Hacker Sound-Mat

Alternate Floor Mat Materials - (Optional) — Floor mat material nom 1/4 in. (6 mm) thick adhered to subfloor with Hacker Floor Primer. Primer to be applied to the surface of the mat prior to the placement of a min 1-1/4 in. (32 mm) of floor-topping mixture.

HACKER INDUSTRIES INC — Type Hacker Sound-Mat II.

Metal Lath (Optional) — For use with 3/8 in. (10 mm) floor mat materials, 3/8 in. expanded steel diamond mesh, 3.4 lbs/sq yd placed over the floor mat material. Hacker Floor Primer to be applied prior to the placement of the metal lath. When metal lath is used, floor topping thickness a nom 1-1/4 in. over the floor mat.

Finish Flooring - Floor Topping Mixture* — Min 3/4 in. thickness of floor topping mixture having a min compressive strength of 1100 psi. Mixture shall consist of 6.8 gal of water to 80 lbs of floor topping mixture to 1.9 cu ft of sand.

HACKER INDUSTRIES INC — Firm-Fill Gypsum Concrete, Firm-Fill 2010, Firm-Fill 3310, Firm-Fill 4010, Firm-Fill High Strength, Gyp-Span Radiant

System No. 3

Subflooring — Min 23/32 in. thick T & G wood structural panels installed perpendicular to trusses with end joints staggered 4 ft. Plywood or nonveneer APA rated panels secured to trusses with construction adhesive and No. 6d ringed shank nails spaced 12 in. OC along each truss. TetraGRIP™ nails measuring 2-3/8 in. long, 0.113 in. diameter, 0.272 in. round head, and helically threaded shank with barbed features on the helix meeting ASTM F1667 and having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.

Finish Floor - Mineral and Fiber Board* — Min 1/2 in. thick, supplied in sizes ranging from 3 ft by 4 ft to 8 ft by 12 ft. All joints to be staggered a min of 12 in. with adjacent sub-floor joints.

HOMASOTE CO — Type 440-32 Mineral and Fiber Board

System No. 4

Subflooring — Min Nom 23/32 in. thick wood structural panels installed perpendicular to trusses with end joints staggered. Plywood or panels secured to trusses with construction adhesive and No. 6d ringed shank nails spaced 12 in. OC along each truss. TetraGRIP™ nails measuring 2-3/8 in. long, 0.113 in. diameter, 0.272 in. round head, and helically threaded shank with barbed features on the helix meeting ASTM F1667 and having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.

Vapor Barrier - (Optional) — Nom 0.010 in. thick commerical asphalt saturated felt.

Finish Flooring - Floor Topping Mixture* — Min 3/4 in. thickness of floor topping mixture having a minimum compressive strength of 1800 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

UNITED STATES GYPSUM CO — Types LRK, HSLRK, CSD

LATICRETE SUPERCAP L L C — Types LRK, HSLRK

USG MEXICO S A DE C V — Types LRK, HSLRK, CSD

Floor Mat Materials* — (Optional) - Floor mat material loose laid over the subfloor. Refer to manufacturer's instructions regarding the minimum thickness of floor topping over each floor mat material.

UNITED STATES GYPSUM CO — Types SAM, LEVELROCK® Brand Sound Reduction Board, LEVELROCK® Brand Floor Underlayment SRM-25

Alternate Floor Mat Materials* - (Optional) — Nom 3/8 in. thick floor mat material loose laid over the subfloor.

GRASSWORX L L C — Type SC50

System No. 5

Subflooring — Min 23/32 in. thick T & G wood structural panels installed perpendicular to trusses with end joints staggered 4 ft. Plywood or nonveneer APA rated panels secured to trusses with construction adhesive and No. 6d ringed shank nails spaced 12 in. OC along each truss. TetraGRIP™ nails measuring 2-3/8 in. long, 0.113 in. diameter, 0.272 in. round head, and helically threaded shank with barbed features on the helix meeting ASTM F1667 and having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.

Vapor Barrier - (Optional) — Nom 0.030 in. thick commercial asphalt saturated felt.

Finish Flooring - Floor Topping Mixture* — Min 1-1/2 in. thickness of floor topping mixture having a min compressive strength of 1000 psi and a cast density of 100 plus or minus 5 pcf. Foam concentrate mixed 40:1 by volume with water and expanded at 100 psi through nozzle. Mixture shall consist of 1.4 cu feet of preformed foam concentrate to 94 lbs Type I Portland cement, 300 lbs of sand with 5-1/2 gal of water.

ELASTIZELL CORP OF AMERICA — Type FF

System No. 6

Deleted.

System No. 7

Subflooring — Min 23/32 in. thick T & G wood structural panels installed perpendicular to trusses with end joints staggered 4 ft. Plywood or nonveneer APA rated panels secured to trusses with construction adhesive and No. 6d ringed shank nails spaced 12 in. OC along each truss. TetraGRIP™ nails measuring 2-3/8 in. long, 0.113 in. diameter, 0.272 in. round head, and helically threaded shank with barbed features on the helix meeting ASTM F1667 and having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.

Vapor Barrier - (Optional) — Nom 0.030 in. thick commercial asphalt saturated felt.

Finish Flooring - Floor Topping Mixture* — Min 1-1/2 in. thickness of floor topping mixture having a min compressive strength of 1000 psi and a cast density of 100 plus or minus 5 pcf. Foam concentrate mixed 40:1 by volume with water and expanded at 100 psi through nozzle. Mixture shall consist of 1.2 cu feet of preformed foam concentrate to 94 lbs Type I Portland cement, 300 lbs of sand with 5.5 gal of water.

AERIX INDUSTRIES — Floor-Topping Mixture

System No. 8

Subflooring — Min 23/32 in. thick T & G wood structural panels installed perpendicular to trusses with end joints staggered 4 ft. Plywood or nonveneer APA rated panels secured to trusses with construction adhesive and No. 6d ringed shank nails spaced 12 in. OC along each truss. TetraGRIP™ nails measuring 2-3/8 in. long, 0.113 in. diameter, 0.272 in. round head, and helically threaded shank with barbed features on the helix meeting ASTM F1667 and having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.

Finish Flooring - Floor Topping Mixture* — Min 3/4 in. thickness of floor topping mixture having a min compressive strength of 1000 psi. Mixture shall consist of 5 to 8 gal of water to 80 lbs of floor topping mixture to 2.1 cu ft of sand.

ULTRA QUIET FLOORS — Types UQF-A, UQF-Super Blend, UQF-Plus 200

System No. 9

Subflooring — Min 23/32 in. thick T & G wood structural panels installed perpendicular to trusses with joints staggered 4 ft. Plywood or nonveneer APA rated panels secured to trusses with construction adhesive and No. 6d ring shank nails spaced 12 in. OC along each truss. TetraGRIP™ nails measuring 2-3/8 in. long, 0.113 in. diameter, 0.272 in. round head, and helically threaded shank with barbed features on the helix meeting ASTM F1667 and having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.

Vapor Barrier - (Optional) — Nom 0.030 in. thick commercial asphalt saturated felt

Finish Flooring - Floor Topping Mixture* — Min 3/4 in. thickness of floor topping mixture having a minimum compressive strength of 1500 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

MAXXON CORP — Type Maxxon Standard and Maxxon High Strength

Floor Mat Materials* - (Optional) — Floor mat material loose laid over the subfloor. Refer to manufacturer's instructions regarding the minimum thickness of floor topping over each floor mat material.

MAXXON CORP — Type Encapsulated Sound Mat

Floor Mat Reinforcement — (Optional) Refer to manufacturer's instructions regarding minimum thickness of floor topping for use with floor mat reinforcement.

Metal Lath - (Optional) 3/8 in. expanded galvanized steel diamond mesh, 3.4 lbs/sq yd loose laid over the floor mat material.

Fiber Glass Reinforcement — (Optional) - 0.015 in. thick PVC coated non-woven fiberglass mesh, 0.368 lbs./sq. yd loose laid over the floor mat material.

System No. 10

Subflooring — Min 23/32 in. thick plywood with T & G edges along the 8 ft sides and exterior glue, or non-veneer APA Rated "Sturd-I-Floor" T & G panels per APA specifications PRP-108. Plywood or non-veneer APA rated panels secured to trusses with construction adhesive and No. 6d ringed shank nails spaced 12 in. OC along each truss. TetraGRIP™ nails measuring 2-3/8 in. long, 0.113 in. diameter, 0.272 in. round head, and helically threaded shank with barbed features on the helix meeting ASTM F1667 and having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.

Vapor Barrier — (Optional) Nom 0.030 in. thick commercial asphalt saturated felt.

Finish Flooring - Floor Topping Mixture* — Min 3/4 in. thickness of floor topping mixture having a min compressive strength of 1000 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

FORMULATED MATERIALS LLC — Types FR-25, FR-30, SiteMix, and Treadstone Advantage

Floor Mat Material* — (Optional) Floor mat material nominal 2 - 9.5 mm thick loose laid over the subfloor. Floor topping shall be a min of 3/4 in.

FORMULATED MATERIALS LLC — Types M1, M2, M3, Elite, Duo, R1, R2, and Treadstone Elite Max

System No. 11

Subflooring — Min 23/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.

Vapor Barrier — (Optional) - Commercial asphalt saturated felt, 0.030 in. thick.

Vapor Barrier — (Optional) - Nom 0.010 in. thick commercial rosin-sized building paper.

Finish Flooring* — Min 3/4 in. thickness of any Floor Topping Mixture bearing the UL Classification Marking as to Fire Resistance. See Floor- and Roof-Topping Mixtures (CCOX) category for names of Classified Companies. Refer to the manufacturer's instructions accompanying the material and/or contact the manufacturer's technical support for specific mix design and minimum thickness recommended for use with eligible floor mat(s).

Floor Mat Materials* — (Optional) - Nom. 1/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 55/025 and Quiet Qurl 55/025 N

Alternate Floor Mat Materials* — (Optional) - Floor mat material Nom. 3/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in.

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 60/040 and Quiet Qurl 60/040 N

Alternate Floor Mat Materials* — (Optional) - Floor mat material Nom. 3/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1-1/2 in.

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 65/075, Quiet Qurl 65/075 N

Alternate Floor Mat Materials* — (Optional) - Floor mat material Nom. 1/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 52/013 and Quiet Qurl 52/013 N

Alternate Floor Mat Materials* — (Optional) - Floor mat material Nom. 1/4 in. entangled net core with a compressible fabric attached to the bottom loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in.

KEENE BUILDING PRODUCTS CO INC — Quiet Qurl 55/025 MT and Quiet Qurl 55/025 N MT

System No. 12

Subflooring — Min 23/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.

Vapor Barrier — (Optional) - Commercial asphalt saturated felt, 0.030 in. thick.

Vapor Barrier — (Optional) - Nom 0.010 in. thick commercial rosin-sized building paper.

Finish Flooring — Min 3/4 in. thickness of lightweight insulating concrete with Perlite Aggregate* or Vermiculite Aggregate*, or gypsum concrete.

See Perlite Aggregate (CFFX) and Vermiculite Aggregate (CJZZ) categories for names of manufacturers.

Floor Mat Materials* — (Optional) - Nom. 1/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 55/025 and Quiet Qurl 55/025 N

Alternate Floor Mat Materials* — (Optional) - Floor mat material Nom. 3/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in.

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 60/040 and Quiet Qurl 60/040 N

Alternate Floor Mat Materials* — (Optional) - Floor mat material Nom. 3/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1-1/2 in.

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 65/075, Quiet Qurl 65/075 N

Alternate Floor Mat Materials* — (Optional) - Floor mat material Nom. 1/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 52/013 and Quiet Qurl 52/013 N

Alternate Floor Mat Materials* — (Optional) - Floor mat material Nom. 1/4 in. entangled net core with a compressible fabric attached to the bottom loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in.

KEENE BUILDING PRODUCTS CO INC — Quiet Qurl 55/025 MT and Quiet Qurl 55/025 N MT

System No. 13

Subflooring — Min 23/32 in. thick plywood with T & G edges along the 8 ft sides and exterior glue, or nonveneer APA Rated "Sturd-I-Floor" T & G panels per APA specifications PRP-108. Plywood or nonveneer APA rated panels secured to trusses with construction adhesive and No. 6d ringed shank nails spaced 12 in. OC along each truss. TetraGRIP™ nails measuring 2-3/8 in. long, 0.113 in. diameter, 0.272 in. round head, and helically threaded shank with barbed features on the helix meeting ASTM F1667 and having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.

Vapor Barrier — (Optional) — Nom 0.030 in. thick commercial asphalt saturated felt.

Finish Flooring - Floor Topping Mixture* — Min 3/4 in. thickness of floor topping mixture having a min compressive strength of 1000 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

ARCOSA SPECIALTY MATERIALS — AccuCrete® Types NexGen, Green, Prime and PrePour, AccuRadiant®, AccuLevel® Types G40, G50 and SD30

Floor Mat Material* — (Optional) — Floor mat material nominal 2 - 9.5 mm thick loose laid over the subfloor. Floor topping shall be a min of 3/4 in.

ARCOSA SPECIALTY MATERIALS — AccuQuiet® Types D13, D-18, D25, DX38, EM.125, EM.125S, EM.250, EM.250S, EM.375, EM.375S, EM.750, and EM.750S.

System No. 14

Subflooring — Min 23/32 in. thick plywood with T & G edges along the 8 ft sides and exterior glue, or nonveneer APA Rated "Sturd-I-Floor" T & G panels per APA specifications PRP-108. Plywood or nonveneer APA rated panels secured to trusses with construction adhesive and No. 6d ringed shank nails spaced 12 in. OC along each truss. TetraGRIP™ nails measuring 2-3/8 in. long, 0.113 in. diameter, 0.272 in. round head, and helically threaded shank with barbed features on the helix meeting ASTM F1667 and having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.

Vapor Barrier — (Optional) — Nom 0.030 in. thick commercial asphalt saturated felt.

Finish Flooring - Floor Topping Mixture* — Min 3/4 in. thickness of floor topping mixture having a min compressive strength of 1000 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

DEPENDABLE LLC — GSL M3.4, GSL K2.6, GSL-CSD and GSL RH.

Floor Mat Materials* — (Optional) - Nom. 1/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 55/025 and Quiet Qurl 55/025 N

Alternate Floor Mat Materials* — (Optional) - Floor mat material Nom. 3/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in.

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 60/040 and Quiet Qurl 60/040 N

Alternate Floor Mat Materials* — (Optional) - Floor mat material Nom. 3/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1-1/2 in.

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 65/075, Quiet Qurl 65/075 N

Alternate Floor Mat Materials* — (Optional) - Floor mat material Nom. 1/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 52/013 and Quiet Qurl 52/013 N

Alternate Floor Mat Materials* — (Optional) - Floor mat material Nom. 1/4 in. entangled net core with a compressible fabric attached to the bottom loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in.

KEENE BUILDING PRODUCTS CO INC — Quiet Qurl 55/025 MT and Quiet Qurl 55/025 N MT

System No. 15

Subflooring — Min 15/32 in. thick wood structural panels, min grade "Underlayment" or "Single-Floor". Face grain of plywood or strength axis of panel to be perpendicular to joists with joints staggered. Plywood or non-veneer APA rated panels secured to trusses with construction adhesive and No. 6d ringed shank nails spaced 12 in. OC along each truss.

Wall and Partition Facings and Accessories* - Sound Barrier (Optional) — Acoustic Sleeper pads stapled to the top of the subfloor, the bottom of the finish floor, or to 5/16 in. thick by 1-1/2 in. wide wood strips and centered over wood trusses. Acoustic Sleeper pads are to be spaced appropriately so that the finish floor panels are fastened through Acoustic Sleeper pads to trusses.

STC ARCHITECTURAL PRODUCTS L L C DBA STC SOUND CONTROL — Acoustic Sleeper

Finish Floor — Min 15/32 in. thick wood structural panels, min grade "Underlayment" or "Single-Floor". Face grain of plywood or strength axis of panel to be perpendicular to joists with joints staggered. Butt joints of panels have the option of being sealed with any UL Classified caulk or sealant found under - Fill, Void or Cavity Materials* (XHHW).

System No. 16

Subflooring — Building Units* — Nom 3/4 in. thick, tongue and grooved boards. Long dimension of boards to be perpendicular to trusses with end joints staggered a min of 4 ft. and centered over the trusses. Boards secured to trusses with 2 in. long self-drilling, self- tapping screws or 2 in. x 0.113 in. Ring Shank nails spaced a max of 12 in. OC in the field with screws/nails located 1 in. from long edge, and max 8 in. OC along the end joints with screws/nails located 1/2 in. from end joint.

ECTEK INTERNATIONAL INC — Type MegaBoard

Vapor Barrier - (Optional) — Nom 0.030 in. thick commercial asphalt saturated felt.

Finish Flooring — Min 1 by 4 in. T & G lumber fastened diagonally to trusses, or min 15/32 in. thick wood structural panels, min grade "Underlayment" or "Single Floor". Face grain of plywood or strength axis of panel to be perpendicular to trusses with joints staggered.

System No. 17

Structural Cement-Fiber Units* — For use with UNITED STATES GYPSUM CO Types C, IP-X2, IPC-AR and ULIX gypsum boards only. Nom 3/4 in. thick, with long edges tongue and grooved. Long dimension of panels to be perpendicular to wood trusses with end joints staggered a min of 2 ft and centered over the trusses. Panels secured to wood trusses with 1-5/8 in. long, No. 8, self- countersinking wood screw spaced a max of 12 in. OC in the field with a screw located 1 in. and 2 in. from each edge, and 8 in. OC on the perimeter with a screw located 2 in. from each edge, located 1/2 in. from the end edges of the panel.

UNITED STATES GYPSUM CO — Types STRUCTO-CRETE, USGSP

System No. 18

Subflooring — Nom 23/32 in. thick wood structural panels installed perpendicular to trusses with end joints staggered. Plywood panels secured to trusses with construction adhesive and No. 6d ringed shank nails spaced 12 in. OC along each truss. TetraGRIP™ nails measuring 2-3/8 in. long, 0.113 in. diameter, 0.272 in. round head, and helically threaded shank with barbed features on the helix meeting ASTM F1667 and having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.

Finish Flooring - Floor Topping Mixture* — Min 1 in. thickness of floor topping mixture having a min compressive strength of 4500 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

SIKA DEUTSCHLAND GMBH — Type SCHONOX AP Rapid Plus

System No. 19

Subflooring — Nom 23/32 in. thick wood structural panels installed perpendicular to trusses with end joints staggered. Plywood panels secured to trusses with construction adhesive and No. 6d ringed shank nails spaced 12 in. OC along each truss. TetraGRIP™ nails measuring 2-3/8 in. long, 0.113 in. diameter, 0.272 in. round head, and helically threaded shank with barbed features on the helix meeting ASTM F1667 and having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.

Vapor Barrier — (Optional) - Commercial asphalt saturated felt, 0.030 in. thick.

Finish Flooring - Floor Topping Mixture* — Min 3/4 in. thickness of any Floor Topping Mixture bearing the UL Classification Marking as to Fire Resistance. See Floor- and Roof-Topping Mixtures (CCOX) category for names of Classified Companies. Refer to the manufacturer's instructions accompanying the material and/or contact the manufacturer's technical support for specific mix design and minimum thickness recommended for use with eligible floor mat(s).

Floor Mat Materials* — (Optional, Not Shown) - Floor mat material loose laid over the subfloor. Refer to manufacturer's instructions regarding the minimum thickness of floor topping over each floor mat material.

Freudenberg Performance Materials LP — EnkaSonic® by Colbond a member of the Low & Bonar group Types 125, 250, 250 Plus, 400, 400 Plus, 750 and 750 Plus.

Floor Mat Reinforcement — (Optional) - Refer to manufacturer's instructions regarding minimum thickness of floor topping for use with floor mat reinforcement.

Metal Lath — (Optional) — Expanded steel diamond mesh, 2.5 lb / sq yd loose laid over floor mat material.

Fiberglass Mesh Reinforcement — (Optional) — Coated non-woven glass fiber mesh grid loose laid over floor mat material.

System No. 20

Subflooring — Nom 23/32 in. thick wood structural panels installed perpendicular to trusses with end joints staggered. Plywood panels secured to trusses with construction adhesive and No. 6d ringed shank nails spaced 12 in. OC along each truss. TetraGRIP™ nails measuring 2-3/8 in. long, 0.113 in. diameter, 0.272 in. round head, and helically threaded shank with barbed features on the helix meeting ASTM F1667 and having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.

Vapor Barrier — (Optional) — Nom 0.030 in. thick commercial asphalt saturated felt.

Floor Mat Materials* — (Optional) — Floor mat material loose laid over the subfloor. Refer to manufacturer's instructions regarding the minimum thickness of floor topping over each floor mat material.

GRASSWORX L L C — SC Types

Finish Flooring* — Min 3/4 in. thickness of any Floor Topping Mixture bearing the UL Classification Marking as to Fire Resistance. See Floor- and Roof-Topping Mixtures (CCOX) category for names of Classified Companies. Refer to the manufacturer's instructions accompanying the material and/or contact the manufacturer's technical support for specific mix design and minimum thickness recommended for use with eligible floor mat(s).

Floor Mat Reinforcement — (Optional) - Refer to manufacturer's instructions regarding minimum thickness of floor topping for use with floor mat reinforcement.

Metal Lath — (Optional) — Expanded steel diamond mesh, 2.5 lb / sq yd loose laid over floor mat material.

Fiberglass Mesh Reinforcement — (Optional) — Coated non-woven glass fiber mesh grid loose laid over floor mat material.

System No. 21

Subflooring — Min 23/32 in. thick T & G wood structural panels installed perpendicular to trusses with joints staggered 4 ft. Plywood or nonveneer APA rated panels secured to trusses with construction adhesive and No. 6d ring shank nails spaced 12 in. OC along each truss. TetraGRIP™ nails measuring 2-3/8 in. long, 0.113 in. diameter, 0.272 in. round head, and helically threaded shank with barbed features on the helix meeting ASTM F1667 and having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.

Vapor Barrier - (Optional) — Nom 0.030 in. thick commercial asphalt saturated felt.

Finish Flooring - Floor Topping Mixture* — Min 3/4 in. thickness of floor topping mixture having a minimum compressive strength of 1500 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

BoldStep — Types BoldStep Regular and BoldStep High Strength

Floor Mat Materials* - (Optional) — Floor mat material loose laid over the subfloor. Refer to manufacturer's instructions regarding the minimum thickness of floor topping over each floor mat material.

BoldStep — Type Sound Mat

Floor Mat Reinforcement — (Optional) Refer to manufacturer's instructions regarding minimum thickness of floor topping for use with floor mat reinforcement.

Metal Lath - (Optional) 3/8 in. expanded galvanized steel diamond mesh, 3.4 lbs/sq yd loose laid over the floor mat material.

Fiber Glass Reinforcement — (Optional) - 0.015 in. thick PVC coated non-woven fiberglass mesh, 0.368 lbs./sq. yd loose laid over the floor mat material.

System No. 22

Subflooring — Min 23/32 in. thick T & G wood structural panels installed perpendicular to trusses with joints staggered 4 ft. Plywood or nonveneer APA rated panels secured to trusses with construction adhesive and No. 6d ring shank nails spaced 12 in. OC along each truss. TetraGRIP™ nails measuring 2-3/8 in. long, 0.113 in. diameter, 0.272 in. round head, and helically threaded shank with barbed features on the helix meeting ASTM F1667 and having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.

Finish Flooring - Floor Topping Mixture* — Min 3/4 in. thickness of floor topping mixture having a minimum compressive strength of 1000 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

AlphaGyp, LLC — Type AlphaGyp

Floor Mat Materials* — (Optional) - Nom. 1/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 55/025 and Quiet Qurl 55/025 N

Alternate Floor Mat Materials* — (Optional) - Floor mat material Nom. 3/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in.

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 60/040 and Quiet Qurl 60/040 N

Alternate Floor Mat Materials* — (Optional) - Floor mat material Nom. 3/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1-1/2 in.

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 65/075, Quiet Qurl 65/075 N

Alternate Floor Mat Materials* — (Optional) - Floor mat material Nom. 1/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 52/013 and Quiet Qurl 52/013 N

Alternate Floor Mat Materials* — (Optional) - Floor mat material Nom. 1/4 in. entangled net core with a compressible fabric attached to the bottom loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in.

KEENE BUILDING PRODUCTS CO INC — Quiet Qurl 55/025 MT and Quiet Qurl 55/025 N MT

2. Trusses — Parallel chord trusses, spaced a max of 24 in. OC, fabricated from nom 2 by 4 lumber, with lumber oriented vertically or horizontally. Min truss depth is 12 in. when Ceiling Dampers* are not used. Min truss depth is 18 in. when Ceiling Damper* is used. Truss members secured together with min 0.036 0356 in. thick galvanized steel plates. Plates have 5/16 in. long teeth projecting perpendicular to the plane of the plate. The teeth are in pairs facing each other (made by the same punch), forming a split tooth type plate. Each tool has a chisel point on its outside edge. These points are diagonally opposite each other for each pair. The top half of each tooth has a twist for stiffness. The pairs are repeated on approx. 7/8 in. centers with four rows of teeth per inch of plate width.

3. Air Duct* (Optional) — Any UL Class 0 or Class 1 flexible air duct installed in accordance with the instructions provided by the damper manufacturer.

4. Ceiling Damper* (Optional). To be used with Air Duct Item 3. — For use with min 18 in. deep trusses Max plenum box size nom 19 in. long by 19 in. wide and 11-7/8 in. high fabricated from galv steel. Aggregate damper openings shall not exceed 128 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturer's installation instructions provided with the damper.

AIRE TECHNOLOGIES INC — Models: CRD model 50 w/Boot, CRD model 50EA w/Boot, CRD model 55 w/Boot, CRD model 55 EA w/Boot.

LLOYD INDUSTRIES INC — Model CRD 50-BT, CRD 50-EA-BT, CRD 55-BT, CRD 55 EA-BT

UNITED ENERTECH CORP — Model C-S/R-WT-L, C-S/R-EA-L, C-S/R-BT, C-S/R-EA-BL

4A. Alternate Ceiling Damper* — For use with min 18 in. deep trusses Max plenum box size nom 13 in. long by 13 in. wide and 11-7/8 in. high fabricated from galv steel. Aggregate damper openings shall not exceed 50 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturer's installation instructions provided with the damper.

LLOYD INDUSTRIES INC — Model CRD 50-BT-6, CRD 50-EA-BT-6, CRD 55-BT-6, CRD 55 EA-BT-6, CRD50-w X-BT-6

4B. Alternate Ceiling Damper* — For use with min 18 in. deep trusses Max size ceiling outlet in plenum box nom 12 in. long by 12 in. wide. Plenum box fabricated from galv steel. Aggregate damper openings shall not exceed 72 sq in. per 100 sq ft of ceiling area. Installed in accordance with the manufacturer's installation instructions provided with the damper.

AIRE TECHNOLOGIES INC — Models: CRD model 50 w/Boot, CRD model 50EA w/Boot, CRD model 55 w/Boot, CRD model 55 EA w/Boot.

LLOYD INDUSTRIES INC — Model CRD 50-95BT, CRD 50-EA-95BT, CRD 55-95BT, CRD 55 EA-95BT

4C. Alternate Ceiling Damper* — For use with min 18 in. deep trusses. Max size ceiling outlet in plenum box nom 16 in. long by 16 in. wide. Aggregate damper openings shall not exceed 128 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturer's installation instructions provided with the damper.

CROWN PRODUCTS CO INC — Models CRD50-FGPB-4.2-CP, -6.0-CP; CRD50-FGPB-4.2-EA-CP, -6.0-EA-CP.

LLOYD INDUSTRIES INC — Models CRD 50- FGPB-4.2, - 4.2 NI, -6.0, -6.0 NI; CRD50-EA-FGPB-4.2, -4.2 NI, -6.0, -6.0 NI

4D. Alternate Ceiling Damper* — For use with min 18 in. deep trusses Max plenum box size nom 15 in. long by 15 in. wide and 11-7/8 in. high fabricated from galv steel. Aggregate damper openings shall not exceed 72 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturer's installation instructions provided with the damper.

LLOYD INDUSTRIES INC — Models 45-CRD-LT-BT and 45-CRD-LTD-BT

4E. Alternate Ceiling Damper* — For use with min 18 in. deep trusses Max size ceiling outlet in plenum box nom 10 in. long by 10 in. wide. Plenum box fabricated from galv steel. Aggregate damper openings shall not exceed 50 sq in. per 100 sq ft of ceiling area. Installed in accordance with the manufacturer's installation instructions provided with the damper.

LLOYD INDUSTRIES INC — Model 45-LTD-95-BT-4

4F. Alternate Ceiling Damper* — For use with min 18 in. deep trusses Max plenum box size nom 19 in. long by 15 in. wide and 11-7/8 in. high fabricated from galv steel. Aggregate damper openings shall not exceed 96 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturer's installation instructions provided with the damper.

LLOYD INDUSTRIES INC — Model CRD50-w X-BT

4G. Alternate Ceiling Damper* — For use with min. 18 in. deep trusses. Max. nom area shall be 349 sq in. Max. overall length and width shall not exceed 18-11/16 in. by 18-11/16 in. with max. 16 in. by 16 in. register opening. Aggregate damper openings shall not exceed 175 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturer's installation instructions provided with the damper. An aluminum or steel grille (Item 9) shall be installed in accordance with installation instructions.

MIAMI TECH INC — Model Series RxCRD, RxCRDS or RxCRPD

4H. Alternate Ceiling Damper* — For use with min 18 in. deep trusses Max plenum box size nom 19 in. long by 19 in. wide and 11-7/8 in. high fabricated from galv steel. Aggregate damper openings shall not exceed 128 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturer's installation instructions provided with the damper.

METAL-FAB INC — Models MSCD-HC and MRCD-HC

4I. Alternate Ceiling Damper* — For use with min 18 in. deep trusses Max plenum box size nom 14 in. long by 16 in. wide and 15 in. high fabricated from galv steel. Aggregate damper openings shall not exceed 112 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturer's installation instructions provided with the damper.

METAL-FAB INC — Model MCCD

4AJ. Alternate Ceiling Damper* — (Optional. To be used with Air Duct Item 3.) — For use with min. 18 in. deep trusses. Max 7-11/32 in. long by 7-11/16 in. wide fabricated from galvanized steel. Aggregate area of the register opening(s) through the ceiling membrane shall not exceed 28.5 sq in. per 100 sq ft of ceiling area. Damper assembly installed in accordance with the manufacturer's installation instructions.

AIRE TECHNOLOGIES INC — Models ITG-CRD2.

4AK. Alternate Ceiling Damper* — (Optional. To be used with Air Duct Item 3.) — For use with min. 18 in. deep trusses. Max 9-11/16 in long by 9-1/16 in. wide fabricated from galvanized steel. Aggregate area of the register opening(s) through the ceiling membrane shall not exceed 44.5 sq in. per 100 sq ft of ceiling area. Damper assembly installed in accordance with the manufacturer's installation instructions.

AIRE TECHNOLOGIES INC — Models SIG-CRD2

4AL. Alternate Ceiling Damper* — (Optional. To be used with Air Duct Item 3.) — For use with min. 18 in. deep trusses. Max 10-13/32 in. long by 10-22/32 in. wide fabricated from galvanized steel. Aggregate area of the register opening(s) through the ceiling membrane shall not exceed 56 sq in. per 100 sq ft of ceiling area. Damper assembly installed in accordance with the manufacturer's installation instructions.

AIRE TECHNOLOGIES INC — Models SMT-CRD2

4AM. Alternate Ceiling Damper* — (Optional. To be used with Air Duct Item 3.) — For use with min. 18 in. deep trusses. Max 8-13/16 in. wide and 8-1/2 in. long fabricated from galvanized steel. Aggregate area of the register opening(s) through the ceiling membrane shall not exceed 37.5 sq in. per 100 sq ft of ceiling area. Damper assembly installed in accordance with the manufacturer's installation instructions.

AIRE TECHNOLOGIES INC — Models GBR-CRD2

5. Batts and Blankets* — (Optional) - Glass fiber or mineral wool insulation bearing the UL Classification Marking as to Surface Burning Characteristics and/or Fire Resistance. When no insulation is installed in the concealed space resilient channels (Item 6) are spaced 24 in. OC. When the resilient channels (Item 6) are spaced 16 in. OC, the insulation shall be a max of 3-1/2 in. thick, and shall be secured against the subflooring with staples at 12 in. OC or held suspended in the concealed space with 0.090 in. diam galv steel wires attached to the wood trusses at 12 in. OC. When the resilient channels are spaced a max of 12 in. OC or when the Steel Framing Members (Item 6A) are used, there is no limit in the overall thickness of insulation, and the insulation can be secured against the subflooring, held suspended in the concealed space or draped over the resilient channels (or Steel Framing Members) and gypsum panel membrane. The finished rating has only been determined when the insulation is secured to the subflooring.

5A. Loose Fill Material* — (Optional) - As an alternate to Item 5, when the resilient channels (Item 6) are spaced a max of 12 in. OC, or when the Steel Framing Members (Item 6A) are used - Any loose fill material bearing the UL Classification Marking for Surface Burning Characteristics. There is no limit in the overall thickness of insulation. The finished rating when loose fill material is used has not been determined

5B. Cavity Insulation - Batts and Blankets* or Loose Fill Material* - (Not Shown) — (As described above in Items 5 and 5A) — For Use with Item 7A — Min. 3-1/2 in thick with no limit on maximum thickness fitted in the concealed space, draped over the resilient channel (Item 6E)/gypsum board (Item 7A) ceiling membrane.

6. Resilient Channels — Formed from min 25 MSG galv steel installed perpendicular to the trusses. When insulation (Item 5) is secured to the underside of the subfloor, the resilient channels are spaced 16 in. OC. When insulation (Items 5 or 5A) is applied over the resilient channel/gypsum panel ceiling membrane, the resilient channels are spaced 12 in. OC. Channels secured to each truss with 1-1/4 in. long Type S bugle head steel screws. Channels overlapped 4 in. at splices. Two channels, spaced 6 in. OC, oriented opposite each gypsum panel end joint as shown in the above illustration. Additional channels shall extend min 6 in. beyond each side edge of panel.

6A. Alternate Steel Framing Members — (Not Shown) - As an alternate to Items 6, main runners, cross tees, cross channels and wall angle as listed below:

A. Main Runners — Nom 10 or 12 ft long, 15/16 in. or 1-1/2 in. wide face, spaced 4 ft. OC. Main runners suspended by min 12 SWG galv steel hanger wires spaced 48 in. OC. Hanger wires to be located adjacent to main runner/cross tee intersections. Hanger wires wrapped and twist-tied on 16d nails driven in to side of trusses at least 5 in. above the bottom face.

B. Cross Tees — Nom 4 ft long, 1-1/2 in. wide face, installed perpendicular to the main runners, spaced 16 in. OC. Additional cross tees or cross channels used at 8 in. from each side of butted gypsum panel end joints. The cross tees or cross channels may be riveted or screw attached to the wall angle or channel to facilitate the ceiling installation.

C. Cross Channels — Nom 4 or 12 ft long, installed perpendicular to main runners, spaced 16 in. OC.

D. Wall Angle or Channel — Painted or galv steel angle with 1 in. legs or channel with 1 in. legs, 1-9/16 in. deep attached to walls at perimeter of ceiling with fasteners 16 in. OC. To support steel framing member ends and for screw-attachment of the gypsum panel.

CGC INC — Type DGL or RX.

USG INTERIORS LLC — Type DGL or RX.

6B. Steel Framing Members* — (Not Shown) — As an alternate to Items 6 and 6A.

a. Furring Channels — Formed of No. 25 MSG galv steel, 2-3/8 in. wide by 7/8 in. deep, spaced 16 in. OC perpendicular to wood structural members. When insulation, Items 5 or 5A is applied over the furring channel/gypsum panel ceiling membrane, the furring channel spacing shall be reduced to 12 in. OC. Channels secured to trusses as described in Item b. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 AWG galvanized steel wire near each end of overlap.

b. Steel Framing Members* — Used to attach furring channels (Item a) to trusses (Item 2). Clips spaced 48 in. OC, and secured to the bottom chord of alternating trusses with one No. 8 x 2-1/2 in. coarse drywall screw through center grommet. When insulation, Items 5 or 5A is applied over the furring channel/gypsum panel ceiling membrane, the clip spacing shall be reduced to 24 in. OC and secured to consecutive trusses. Furring channels are friction fitted into clips. Adjoining channels are overlapped as described in Item a. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping No. 6 framing screws, min 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Additional clips required to hold furring channel that supports the gypsum board butt joints, as described in Item 7.

PLITEQ INC — Type Genie Clip

6C. Steel Framing Members* — (Not Shown) - As an alternate to Items 6, 6A ,and 6B.

a. Furring Channels — Formed of No. 25 MSG galv steel, 2-9/16 in. or 2-23/32 in. wide by 7/8 in. deep, spaced 16 in. OC perpendicular to wood structural members. When insulation, Items 5 or 5A is applied over the furring channel/gypsum panel ceiling membrane, the furring channel spacing shall be reduced to 12 in. OC. Channels secured to trusses as described in Item b. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 AWG galv steel wire near each end of overlap.

b. Steel Framing Members* — Used to attach furring channels (Item a) to trusses (Item 2). Clips spaced 48 in. OC. RSIC-1 and RSIC-1 (2.75) clips secured to alternating trusses with No. 8 x 2-1/2 in. course drywall screw through the center grommet. Furring channels are friction fitted into clips. RSIC-1 clips for use with 2-9/16 in. wide furring channels. RSIC-1 (2.75) clips for use with 2-23/32 in. wide furring channels. Adjoining channels are overlapped as described in Item a. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping No. 6 framing screws, min 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Additional clips required to hold furring channel that supports the gypsum board butt joints, as described in Item 7.

PAC INTERNATIONAL L L C — Types RSIC-1, RSIC-1 (2.75).

6D. Alternate Steel Framing Members* — (Not Shown) As an alternate to items 6 to 6C, furring channels and Steel Framing Members as described below.

a. Furring Channels — Formed of No. 25 MSG galv steel, 2-5/8 in. wide by 7/8 in deep, spaced 16 in OC, perpendicular to wood structural members. When insulation, Items 5 or 5A is applied over the furring channel/gypsum panel ceiling membrane, the furring channel spacing shall be reduced to 12 in. OC. Channels secured to trusses as described in Item b. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 AWG galv steel wire near each end of overlap.

b. Steel Framing Members* — Used to attach furring channels (Item a) to the trusses (Item 2). Clips spaced at 48" OC and secured to the bottom of the trusses with one 2 in. Coarse Drywall Screw with 1 in. diam washer through the center hole. Furring channels are then friction fitted into clips. Ends of channels are overlapped 6" and tied together with double strand of No. 18 AWG galvanized steel wire.Additional clips are required to hold the Gypsum Butt joints as described in item 7.

STUDCO BUILDING SYSTEMS — RESILMOUNT Sound Isolation Clips - Type A237R

6E. Resilient Channels - (Not Shown) — For Use With Item 7A - Formed from min 25 MSG galv steel installed perpendicular to trusses and spaced 16 in. OC. Channels secured to each truss with 1-5/8 in. long Type S bugle head steel screws. Channels overlapped 4 in. at splices. Two channels, spaced 6 in. OC, oriented opposite each gypsum panel end joint. Additional channels shall extend min 6 in. beyond each side edge of panel. Insulation, Item 5B is applied over the resilient channel/gypsum panel (Item 7A) ceiling membrane.

6F. Alternate Steel Framing Members* — (Not Shown) As an alternate to items 6 to 6E, furring channels and Steel Framing Members as described below.

a. Furring Channels — Formed of No. 25 MSG galv steel, 2-1/2 in. wide by 7/8 in deep, spaced 16 in OC, perpendicular to wood structural members. When insulation, Items 5 or 5A is applied over the furring channel/gypsum panel ceiling membrane, the furring channel spacing shall be reduced to 12 in. OC. Channels secured to trusses as described in Item b. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 AWG galv steel wire near each end of overlap.

b. Steel Framing Members* — Used to attach furring channels (Item a) to the trusses (Item 2). Clips spaced at 48" OC and secured to the bottom of the trusses with one 2-1/2 in. Coarse Drywall Screw with 1 in. diam washer through the center hole. Furring channels are then friction fitted into clips. Ends of channels are overlapped 6" and tied together with double strand of No. 18 AWG galvanized steel wire. Additional clips are required to hold the Gypsum Butt joints as described in item 7.

REGUPOL AMERICA — Type SonusClip

6G. Steel Framing Members* — — (Optional, Not Shown) — As an alternate to Item 6.

a. Furring Channels — Formed of No. 25 MSG galv steel, nominal 2-1/2 in. wide by 7/8 in. deep, spaced as indicated in Item 6, perpendicular to the trusses. Channels secured to Cold Rolled Channels at every intersection with a 3/4 in. TEK screw through each furring channel leg. Ends of adjoining channels overlapped 12 in. and fastened together with two double strand No. 18 SWG galv steel wire ties, one at each end of overlap, or with two 3/4 in. TEK screws in each leg of the overlap section. Two furring channels used at end joints of gypsum board (Item 7), each extending a min of 6 in. beyond both side edges of the board.

b. Cold Rolled Channels — 1-1/2 in. by 1/2 in., formed from No. 16 ga. galv steel, positioned vertically and parallel to trusses, friction-fitted into the channel caddy on the Steel Framing Members (Item 6Gd) and secured with two 3/4 in. TEK screws. Adjoining lengths of cold rolled channels lapped min. 12 in. and secured along bottom legs with four 3/4 in. TEK screws and wire-tied together with two double strand 18 SWG galv steel wire ties, one at each end of overlap.

c. Blocking — Where truss design does not permit direct, full contact of the hanger bracket, a piece of nominal 2 by 4 in. lumber (blocking), min. 12 in. long to permit full contact of the hanger bracket, to be secured vertically to the side of the trusses at the top and bottom of the blocking at each Steel Framing Member (Item 6Gd) location with 16d nails or minimum 2-1/2 in. screws.

d. Steel Framing Members* — Spaced 48 in. OC. max along truss, and secured to the truss on alternating trusses with two, #10 x 1-1/2 in. screws through mounting holes on the hanger bracket.

PAC INTERNATIONAL L L C — Type RSIC-SI-CRC EZ Clip

6H. Steel Framing Members* — (Not Shown) — As an alternate to Item 6.

a. Furring Channels — Formed of No. 25 MSG galv steel, nominal 2-1/2 in. wide by 7/8 in. deep, spaced as indicated in Item 6, perpendicular to trusses and friction fit into Steel Framing Members (Item 6Hc). Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap or with two TEK screws along each leg of the 6 in. overlap. Two furring channels used at end joints of gypsum board (Item 7). Butt joint channels held in place by strong back channels placed upside down, on top of, and running perpendicular to primary furring channels, extending 6 in. longer than length of gypsum side joint. Strong back channels spaced maximum 48 in. OC. Strong back channels secured to every intersection of primary furring channels with four 7/16 in. pan head screws, two along each of the legs at intersections. Butt joint channels run perpendicular to strong back channels and shall be minimum 6 in. longer than length of joint, secured to strong back channels with 7/16 in. pan head screws, two along each of the legs at intersection with strong back channels.

b. Blocking — Where truss design does not permit direct, full contact of the hanger bracket, a piece of nominal 2 by 4 in. lumber (blocking), min. 12 in. long to permit full contact of the hanger bracket, to be secured vertically to the side of the trusses at the top and bottom of the blocking at each Steel Framing Member (Item 6Hc) location with 16d nails or minimum 2-1/2 in. screws.

c. Steel Framing Members* — Used to attach furring channels (Item 6Ha) to trusses. Clips spaced 48 in. OC and secured along truss webs at each furring channel intersection with min. 3/4 in. long self-drilling #10 x 1-1/2 in. screws through each of the provided hole locations. Furring channels are friction fitted into clips.

PAC INTERNATIONAL L L C — Type RSIC-S1-1 Ultra

6I. Steel Framing Members* — (Optional - Not Shown) — Used to attach resilient channels (Item 6) to trusses (Item 2). Clips spaced 48 in. OC and secured to trusses with one No. 8 x 2-1/2 in. coarse drywall screw through center grommet hole. Channels secured to clips with one #10 x 1/2 in. pan-head self-drilling screw. Ends of adjoining channels overlapped 6 in. and secured together with two #8 15 x 1/2 in. Philips Modified screws spaced 2-1/2 in. from the center of the overlap. Gypsum board butt joints require additional resilient channels spaced 1-1/2 in. from the butt joint on either side. One edge of the extra channels will extend to an adjacent truss where it is secured with a clip.

KEENE BUILDING PRODUCTS CO INC — Type RC+ Assurance Clip

6J. Steel Framing Members* — (Optional, Not Shown) — Used as an alternate method to attach resilient channelsto structural members. A resilient sound isolation accessory shall be used at each attachment point of the resilient channels and spaced max 24 in. O.C. Channel ends butted and centered under the structural members and attached with one accessory at each end. Additional accessories used to hold resilient channels that support the gypsum board end joints. The accessory envelops the mounting edge of the resilient channel. The accessory and resilient channel are fastened to the structural members with the screws supplied with the accessory and per the accessory manufacturer's installation instructions. Gypsum Board butt joints staggered minimum 24 in. OC and Gypsum Board screws spaced 8 in. OC when used.

PAC INTERNATIONAL L L C — Type RC-1 Boost

6K. Resilient Channels — For use with American Gypsum Co. Type AG-C gypsum board only. Resilient channels, formed of 25 MSG thick galv steel, spaced 16 in. OC perpendicular to trusses. When insulation (Items 5, 5A, 5B) is applied over the resilient channel/gypsum board ceiling membrane, the spacing may remain at 16 in. OC. Channels secured to each truss with 1-1/4 in. long Type S bugle head steel screws. Channels overlapped 4 in. at splices. Two channels, spaced 6 in OC, oriented opposite each gypsum board end joint as shown in the above illustration. Additional channels shall extend 6 in beyond each side edge of board.

6L. Steel Framing Members* — (Optional, Not Shown, As an alternate to Item 6) — Furring channels and Steel Framing Members as described below:

a. Furring Channels — Formed of No. 25 MSG galv steel. 2-23/32 in. wide by 7/8 in. When there is no insulation installed in the concealed space the furring channels are spaced 24 in. OC max perpendicular to trusses. When insulation (Item 5) is secured to the underside of the subfloor the furring channels are spaced 16 in. OC max. When insulation (Item 5) is applied over the furring channel/gypsum panel ceiling membrane, the furring channels are spaced 12 in. OC max. Channels secured to trusses as described in Item 6Lb. Ends of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping #6 framing screws, min. 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Additional clips required to hold furring channel that supports the wallboard butt joints, as described in Item 7.

b. Steel Framing Members* — Used to attach furring channels (Item 6La) to trusses (Item 2). Clips spaced 48 in. OC max with No. 8 x 2-1/2 in. course drywall screw through the center grommet. Furring channels are friction fitted into clips.

CLARKDIETRICH BUILDING SYSTEMS — Type ClarkDietrich Sound Clips

6M. Steel Framing Members* — (Optional, Not Shown) — Used as an alternate method to attach resilient channels (Items 6 and 6E) to structural members. A resilient sound isolation accessory shall be used at each attachment point of the resilient channels and spaced 16 in. O.C. Channel ends butted and centered under the structural members and attached with one accessory at each end. Additional accessories used to hold resilient channels that support the gypsum board end joints. The accessory envelops the mounting edge of the resilient channel. The accessory and resilient channel are fastened to the structural members with the 2in screws supplied with the accessory and per the accessory manufacturer's installation instructions. Gypsum Board butt joints staggered minimum 24 in. OC and Gypsum Board screws spaced 8 in. OC when used.

PAC INTERNATIONAL L L C — Type RC-1 Boost

6N. Steel Framing Members* — (Not Shown) - As an alternate to Item 6E.

a. Furring Channels — Formed of No. 25 MSG galv steel, 2-9/16 in. or 2-23/32 in. wide by 7/8 in. deep, spaced 16 in. OC perpendicular to wood structural members. When insulation, Items 5 or 5A is applied over the furring channel/gypsum panel ceiling membrane, the furring channel spacing shall be reduced to 12 in. OC. Channels secured to trusses as described in Item b. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 AWG galv steel wire near each end of overlap.

b. Steel Framing Members* — Used to attach furring channels (Item a) to trusses (Item 2). Clips spaced 48 in. OC. RSIC-1 and RSIC-1 (2.75) clips secured to alternating trusses with No. 8 x 2-1/2 in. course drywall screw through the center grommet. Furring channels are friction fitted into clips. RSIC-1 clips for use with 2-9/16 in. wide furring channels. RSIC-1 (2.75) clips for use with 2-23/32 in. wide furring channels. Adjoining channels are overlapped as described in Item a. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping No. 6 framing screws, min 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Additional clips required to hold furring channel that supports the gypsum board butt joints, as described in Item 7.

PAC INTERNATIONAL L L C — Types RSIC-1, RSIC-1 (2.75), RSIC-SI-X

6O. Steel Framing Members* — — (Optional, Not Shown) — As an alternate to Item 6E.

a. Furring Channels — Formed of No. 25 MSG galv steel, nominal 2-1/2 in. wide by 7/8 in. deep, spaced as indicated in Item 6, perpendicular to the trusses. Channels secured to Cold Rolled Channels at every intersection with a 3/4 in. TEK screw through each furring channel leg. Ends of adjoining channels overlapped 12 in. and fastened together with two double strand No. 18 SWG galv steel wire ties, one at each end of overlap, or with two 3/4 in. TEK screws in each leg of the overlap section. Two furring channels used at end joints of gypsum board (Item 7), each extending a min of 6 in. beyond both side edges of the board.

b. Cold Rolled Channels — 1-1/2 in. by 1/2 in., formed from No. 16 ga. galv steel, positioned vertically and parallel to trusses, friction-fitted into the channel caddy on the Steel Framing Members (Item 6Gd) and secured with two 3/4 in. TEK screws. Adjoining lengths of cold rolled channels lapped min. 12 in. and secured along bottom legs with four 3/4 in. TEK screws and wire-tied together with two double strand 18 SWG galv steel wire ties, one at each end of overlap.

c. Blocking — Where truss design does not permit direct, full contact of the hanger bracket, a piece of nominal 2 by 4 in. lumber (blocking), min. 12 in. long to permit full contact of the hanger bracket, to be secured vertically to the side of the trusses at the top and bottom of the blocking at each Steel Framing Member (Item 6Gd) location with 16d nails or minimum 2-1/2 in. screws.

d. Steel Framing Members* — Spaced 48 in. OC. max along truss, and secured to the truss on alternating trusses with two, #10 x 2 in. screws through mounting holes on the hanger bracket.

PAC INTERNATIONAL L L C — Type RSIC-SI-CRC EZ Clip

6P. Steel Framing Members* — (Not Shown) — As an alternate to Item 6E.

a. Furring Channels — Formed of No. 25 MSG galv steel, nominal 2-1/2 in. wide by 7/8 in. deep, spaced as indicated in Item 6, perpendicular to trusses and friction fit into Steel Framing Members (Item 6Hc). Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap or with two TEK screws along each leg of the 6 in. overlap. Two furring channels used at end joints of gypsum board (Item 7). Butt joint channels held in place by strong back channels placed upside down, on top of, and running perpendicular to primary furring channels, extending 6 in. longer than length of gypsum side joint. Strong back channels spaced maximum 48 in. OC. Strong back channels secured to every intersection of primary furring channels with four 7/16 in. pan head screws, two along each of the legs at intersections. Butt joint channels run perpendicular to strong back channels and shall be minimum 6 in. longer than length of joint, secured to strong back channels with 7/16 in. pan head screws, two along each of the legs at intersection with strong back channels.

b. Blocking — Where truss design does not permit direct, full contact of the hanger bracket, a piece of nominal 2 by 4 in. lumber (blocking), min. 12 in. long to permit full contact of the hanger bracket, to be secured vertically to the side of the trusses at the top and bottom of the blocking at each Steel Framing Member (Item 6Hc) location with 16d nails or minimum 2-1/2 in. screws.

c. Steel Framing Members* — Used to attach furring channels (Item 6Ha) to trusses. Clips spaced 48 in. OC and secured along truss webs at each furring channel intersection with min. 3/4 in. long self-drilling #10 x 2 in. screws through each of the provided hole locations. Furring channels are friction fitted into clips.

PAC INTERNATIONAL L L C — Type RSIC-S1-1 Ultra

7. Gypsum Board* — Nom 5/8 in. thick, 48 in. wide gypsum panels. When resilient channels (Item 6) are used, gypsum panels installed with long dimension perpendicular to resilient channels. Gypsum panels secured with 1 in. long Type S bugle head steel screws spaced 12 in. OC and located a min of 1/2 in. from side joints and 3 in. from end joints. When insulation (Items 5 or 5A) is applied over the resilient channel/gypsum panel ceiling membrane the screw spacing shall be reduced to 8 in. OC. End joints secured to both resilient channels as shown in end joint detail. When Steel Framing Members (Item 6A) are used, gypsum panels installed with long dimension perpendicular to cross tees with side joints centered along main runners and end joints centered along cross tees. Panels fastened to cross tees with 1 in. long Type S bugle-head screws spaced 8 in. OC in the field and along end joints. Panels fastened to main runners with 1 in. long Type S bugle-head screws spaced midway between cross tees. Screws along sides and ends of panels spaced 3/8 to 1/2 in. from board edge. End joints of panels shall be staggered with spacing between joints on adjacent panels not less than 2 ft OC. When Steel Framing Members (Item 6B) are used, one layer of nom 5/8 in. thick, 4 ft wide gypsum board is installed with long dimensions perpendicular to furring channels. Gypsum board secured to furring channels with nom 1 in. long No. 6 Type S bugle-head steel screws spaced 12 in. OC in the field of the board. Screw spacing is reduced to 8 in. OC when insulation is applied over the furring channel/gypsum panel ceiling membrane. Gypsum board butted end joints shall be staggered minimum 16 in. within the assembly. At the gypsum board butt joints, each end of each gypsum board shall be supported by a single length of furring channel equal to the width of the gypsum board plus 6 in. on each end. These additional furring channels shall be attached to underside of the truss with Genie clips as described in Item 6B. Screw spacing along the gypsum board butt joint shall be 6 in. OC. When Steel Framing Members (Item 6C, 6L) are used, gypsum panels installed with long dimensions perpendicular to furring channels. Panels attached to the furring channels using 1 in. long Type S bugle-head steel screws spaced 8 in. OC along butted end joints and in the field of the panel. Butted end joints shall be staggered min. 2 ft within the assembly, and occur midway between the continuous furring channels. Each end of each gypsum panel shall be supported by a single length of furring channel equal to the width of the gypsum panel plus 6 in. on each end. The two support furring channels shall be spaced approximately 3-1/2 in. OC, and be attached to underside of the truss with one clip at each end of the channel. When Steel Framing Members (Item 6D) are used, one layer of nom 5/8 in. thick, 4 ft wide gypsum board is installed with long dimensions perpendicular to furring channels. Gypsum board secured to furring channels with nom 1 in. long Type S bugle-head steel screws spaced 8 in. OC in the field of the board. Gypsum board butted end joints shall be staggered minimum 48 in. and centered over main furring channels. At the gypsum board butt joints, each end of each gypsum board shall be supported by a single length of furring channel equal to the width of the gypsum board plus 3 in. on each end joint. The two support furring channels shall be spaced approximately 3 in. in from joint. Screw spacing along the gypsum board butt joint and along both additional channels shall be 8 in. OC. Additional screws shall be placed in the adjacent section of gypsum board into the aforementioned 3 in. extension of the extra butt joint channels as well as into the main channel that runs between. Butt joint furring channels shall be attached with one RESILMOUNT Sound Isolation Clip at each end of the channel.

When Steel Framing Members (Item 6F) are used, one layer of nom 5/8 in. thick, 4 ft wide gypsum board is installed with long dimensions perpendicular to furring channels. Gypsum board secured to furring channels with nom 1 in. long Type S bugle-head steel screws spaced 8 in. OC in the field of the board. Gypsum board butted end joints shall be staggered minimum 48 in. and centered over main furring channels. At the gypsum board butt joints, an additional single length of furring channel shall be installed and be spaced approximately 3 in. from the butt joint (6 in. from the continuous furring channels) to support the floating end of the gypsum board. Each of these shorter sections of furring channel shall extend one truss beyond the width of the gypsum panel and be attached to the adjacent trusses with one SonusClip at every truss involved with the butt joint.

When Steel Framing Members (Item 6G) are used, nom 5/8 in. thick, 4 ft wide gypsum board, installed as described in Item 7. Adjacent butt joints staggered minimum 48 in. OC.

When Steel Framing Members (Item 6H) are used, nom 5/8 in. thick, 4 ft wide gypsum board, installed as described in Item 7. Butt joints staggered minimum 24 in. OC.

AMERICAN GYPSUM CO — Type AG-C

CGC INC — Types C, IP-X2, IPC-AR

CERTAINTEED GYPSUM INC — Type C

NATIONAL GYPSUM CO — Types eXP-C, FSW-G, FSW-C, FSK-G, FSK-C.

UNITED STATES GYPSUM CO — Types C, IP-X2, IPC-AR

USG BORAL DRYWALL SFZ LLC — Type C

PANEL REY S A — Type PRC

7A. Gypsum Board* - (Not Shown) — For use with Items 5B and 6E. Nom 5/8 in. thick, 48 in. wide gypsum panels installed with long dimension perpendicular to resilient channels. Gypsum panels secured with 1 in. long Type S bugle head steel screws spaced 8 in. OC and located a min of 1/2 in. from side joints and 3 in. from the end joints. Finish Rating with this ceiling system is 20 min.

CGC INC — Type ULIX

UNITED STATES GYPSUM CO — Type ULIX

8. Finishing System - (Not Shown) — Vinyl, dry or premixed joint compound, applied in two coats to joints and screw-heads. Nom 2 in. wide paper tape embedded in first layer of compound over all joints. As an alternate, nom 3/32 in. thick veneer plaster may be applied to the entire surface of gypsum board.

9. Grille — Aluminum or Steel grille, installed in accordance with the installation instructions provided with the ceiling damper.

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

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FIRE RATING FOR 1 HOUR FLOOR/CEILING ASSEMBLY
U.L. DESIGN NO. L563

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& ASSOCIATES

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PROJECT:

TANNER'S
CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

FIRE RESISTANCE
RATINGS

DATE: 06/26/2026
REVISED:

GEORGE J. KONTOGIANNIS REGISTERED No. AR00034309 STATE OF INDIANA ARCHITECT

GEORGE J. KONTOGIANNIS, LICENSE #AR00034309
EXPIRATION DATE 12/31/2027

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- [ ] SUBMISSION SET 06/27/2025
- [ ] ZONING SET 05/07/2026
- [x] BID SET 06/26/2026
- [ ] PERMIT SET
- [ ] CONSTRUCTION SET

FR-4

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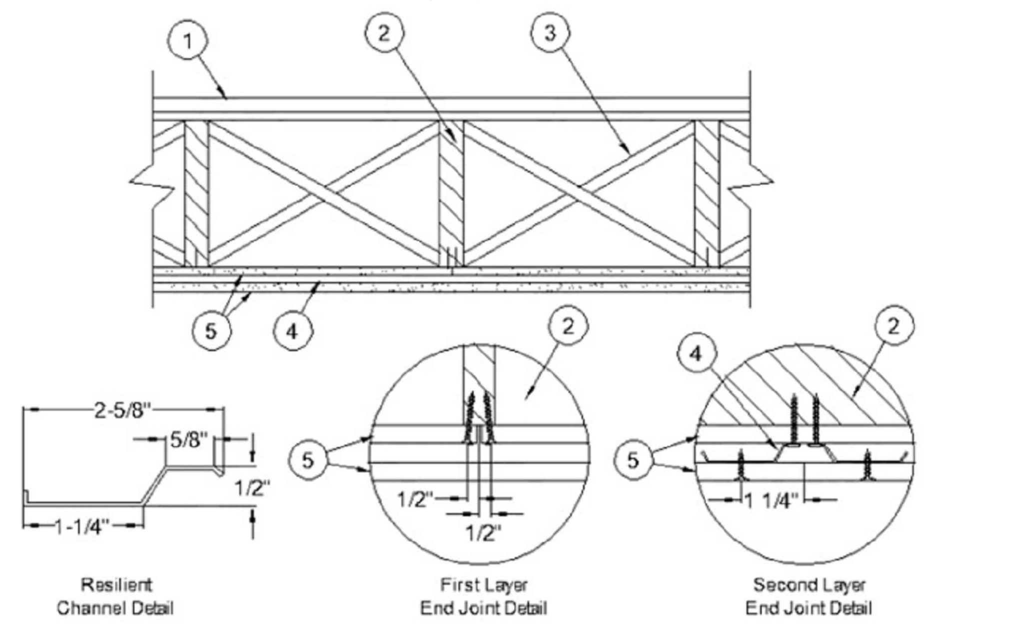
Design No. L511
January 19, 2026

Unrestrained Assembly Rating — 2 Hr.
Finish Rating — 71 Min.
This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be used — See Guide BXUV or BXUV7

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.




1. Flooring Systems — The flooring system shall consist of one of the following:
System No. 1
Subflooring — Min 1 by 6 in. T & G lumber fastened diagonally to joists.
Vapor Barrier — Nom 0.010 in. thick commercial rosin-sized building paper.
Finish Flooring — Min 1 by 3 in. T & G and end matched, laid perpendicular to joists.
System No. 2
Subflooring — Min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.
Vapor Barrier - (Optional) — Nom 0.010 in. thick commercial asphalt saturated felt.
Finish Flooring - Floor Topping Mixture* — Min 3/4 in. thickness of floor topping mixture having a minimum compressive strength of 1800 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.
UNITED STATES GYPSUM CO — Types LRK, HSLRK, CSD
USG MEXICO S A DE C V — Types LRK, HSLRK, CSD
Floor Mat Materials* — (Optional) - Floor mat material loose laid over the subfloor. Refer to manufacturer's instructions regarding the minimum thickness of floor topping over each floor mat material.
UNITED STATES GYPSUM CO — Types SAM, LEVELROCK® Brand Sound Reduction Board, LEVELROCK® Brand Floor Underlayment SRM-25
Alternate Floor Mat Materials* (Optional) — Nom 3/8 in. thick floor mat material loose laid over the subfloor. Floor topping thickness shall be as specified under Floor Topping Mixture*.
GRASSWORX L L C — Type SC50
System No. 3
Subflooring — Min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.
Vapor Barrier - (Optional) —Nom 0.010 in. thick commercial rosin-sized building paper.
Finish Flooring — Min 19/32 in. wood structural panels, min grade "Underlayment" or "Single Floor". Face grain of plywood or strength axis of panels to be perpendicular to joists with joints staggered.
System No. 4
Subflooring — Min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.
Vapor Barrier - (Optional) — Nom 0.010 in. thick commercial rosin-sized building paper.
Finish Flooring — Floor Topping Mixture* — Min 1-1/2 in. thickness of floor topping mixture having a min compressive strength of 1000 psi and a cast density of 100 plus or minus 5 pcf. Foam concentrate mixed 40:1 by volume with water and expanded at 100 psi through nozzle. Mixture shall consist of 1.4 cu feet of preformed foam concentrate to 94 lbs Type I Portland cement, 300 lbs of sand with 5-1/2 gal of water.
ELASTIZELL CORP OF AMERICA — Type FF
System No. 5
Subflooring — Min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.
Vapor Barrier - (Optional) — Nom 0.010 in. thick commercial rosin-sized building paper.
Floor Mat Materials* - (Optional) — Floor mat material nom 1/8 in. (3mm) thick loose laid over the subfloor. Floor topping thickness shall be a min of 1 in. (25mm)
HACKER INDUSTRIES INC — FIRM-FILL SCM 125
Alternate Floor Mat Materials - (Optional) — Floor mat material nom 1/4 in. (6mm) thick loose laid over the subfloor. Floor topping thickness shall be a min of 1 in. (25mm)
HACKER INDUSTRIES INC — Types FIRM-FILL SCM 250 and FIRM-FILL SCM 250+
Alternate Floor Mat Materials - (Optional) — Floor mat material nom 3/8 in. (10mm) thick loose laid over the subfloor. Floor topping thickness shall be a min of 1-1/4 in. (32mm)
HACKER INDUSTRIES INC — — Types FIRM-FILL SCM 400 and FIRM-FILL SCM 400+
Alternate Floor Mat Materials - (Optional) — Floor mat material nom 3/4 in. (19mm) thick loose laid over the subfloor. Floor topping thickness shall be a min of 1-1/2 in. (38mm)
HACKER INDUSTRIES INC — Types FIRM-FILL SCM 750 and FIRM-FILL SCM 750+
Alternate Floor Mat Materials - (Optional) — Floor mat material nom 5/64 in. (2mm) thick adhered to subfloor with Hacker Floor Primer. Primer to be applied to the surface of the mat prior to the placement of a min 1-1/4 in. of floor-topping mixture.
HACKER INDUSTRIES INC — Type Hacker Sound-Mat.
Alternate Floor Mat Materials - (Optional) — Floor mat material nom 1/4 in. (6mm) thick adhered to subfloor with Hacker Floor Primer. Primer to be applied to the surface of the mat prior to the placement of a min 1-1/4 in. (32mm) of floor-topping mixture.
HACKER INDUSTRIES INC — Type Hacker Sound-Mat II.
Metal Lath (Optional) — For use with 3/8 in. (10 mm) floor mat materials, 3/8 in. expanded steel diamond mesh, 3.4 lbs/sq yd placed over the floor mat material. Hacker Floor Primer to be applied prior to the placement of the metal lath. When metal lath is used, floor topping thickness a nom 1-1/4 in. over the floor mat.
Finish Flooring — Floor Topping Mixture* — Min 3/4 or 1 in. thickness of floor topping mixture for min 19/32 or min 15/32 in. thick wood structural panels respectively, having a m
HACKER INDUSTRIES INC — Firm-Fill Gypsum Concrete, Firm-Fill 2010, Firm-Fill 4010, Firm-Fill High Strength, Gyp-Span Radiant, Firm-Fill 3310.
System No. 6
Deleted.
System No. 7
Subflooring — Min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.
Vapor Retarder — (Optional) — Nom 0.030 in. thick commercial asphalt saturated felt.
Finish Flooring — Floor Topping Mixture* — Min 3/4 or 1 in. thickness of floor topping mixture for min 19/32 or min 15/32 in. thick wood structural panels respectively, having a min compressive strength of 1000 psi. Mixture shall consist of 5 to 8 gal of water to 80 lbs of floor topping mixture to 2.1 cu ft of sand.
ULTRA QUIET FLOORS — Types UQF-A, UQF-Super Blend, UQF-Plus 200
System No. 8
Subflooring — Min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.
Vapor Barrier — (Optional) — Nom 0.030 in. thick commercial asphalt saturated felt.
Finish Flooring — Floor Topping Mixture* — Min 3/4 thickness of floor topping mixture having a minimum compressive strength of 1500 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.
MAXXON CORP — Type Maxxon Standard and Maxxon High Strength
Floor Mat Materials* - (Optional) — Floor mat material loose laid over the subfloor. Refer to manufacturer's instructions regarding the minimum thickness of floor topping over each floor mat material.
MAXXON CORP — Type Encapsulated Sound Mat.
Floor Mat Reinforcement — (Optional) - Refer to manufacturer's instructions regarding minimum thickness of floor topping for use with floor mat reinforcement.
Metal Lath — (Optional) — 3/8 in. expanded galvanized steel diamond mesh, 3.4 lbs/sq yd loose laid over the floor mat material.
Fiber Glass Reinforcement - (Optional, Not Shown) - 0.015 in. thick PVC coated non-woven fiberglass mesh, 0.368 lbs/sq yd loose laid over the floor mat material.
System No. 9
Subflooring — Min 15/32 in. thick wood structural panels, min grade C-D or Sheathing. Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.
Vapor Barrier — (Optional) Nom 0.010 in. thick commercial rosin-sized building paper.
Finish Flooring — Floor Topping Mixture* — Min 3/4 floor topping mixture, having a min compressive strength of 1000 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.
FORMULATED MATERIALS LLC — Types FR-25, FR-30, SiteMix, and Treadstone Advantage
Alternate Floor Mat Material* — (Optional) Floor mat material nominal 2 - 9.5 mm thick loose laid over the subfloor. Floor topping shall be a min of 3/4 in. or 1 in. thickness of floor topping mixture for 19/32 or 15/32 in. thick wood structural panels respectively.
FORMULATED MATERIALS LLC — Types M1, M2, M3, Elite, Duo, R1, R2, and Treadstone Elite Max
System No. 10
Subflooring — Min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.
Finish Floor - Mineral and Fiber Board* — Min 1/2 in. thick, supplied in sizes ranging from 3 ft by 4 ft to 8 ft by 12 ft. All joints to be staggered a min of 12 in. with adjacent sub-floor joints.
HOMASOTE CO — Type 440-32 Mineral and Fiber Board
System No. 11
Subflooring — Min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.
Vapor Barrier - (Optional) — Nom 0.030 in. thick commercial asphalt saturated felt.
Finish Flooring - Floor Topping Mixture* — Min 1-1/2 in. thickness of floor topping mixture having a min compressive strength of 1000 psi and a cast density of 105 plus or minus 5 pcf. Foam concentrate mixed 40:1 by volume with water and expanded at 100 psi through nozzle. Mixture shall consist of 1.2 cu feet of preformed foam concentrate to 94 lbs Type I Portland cement, and 300 lbs of sand with 5.5 gal of water.
AERIX INDUSTRIES — Floor Topping Mixture
System No. 12
Subflooring — Min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.
Vapor Barrier - (Optional) — Nom 0.010 in. thick commercial rosin-sized building paper.
Finish Flooring - Floor Topping Mixture* — Min 3/4 floor topping mixture , having a min compressive strength of 1000 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.
ARCOSA SPECIALTY MATERIALS — AccuCrete® Types NexGen, Green, Prime and PrePour, AccuRadiant®, AccuLevel® Types G40, G50 and SD30
Alternate Floor Mat Material* - (Optional) - Floor mat material nominal 2 - 9.5 mm thick loose laid over the subfloor. Floor topping shall be a min of 3/4 in. or 1 in. thickness of floor topping mixture for 19/32 or 15/32 in. thick wood structural panels respectively.
ARCOSA SPECIALTY MATERIALS — AccuQuiet® Types D13, D-18, D25, DX38, EM.125, EM.125S, EM.250, EM.250S, EM.375, EM.375S, EM.750, and EM.750S.
System No. 13
Subflooring — 15/32 or 19/32 in. thick wood structural panels, min. grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to joists with joints staggered.
Vapor Barrier — (Optional) — Nom 0.030 in. thick commercial asphalt saturated felt.
Finish Flooring — Floor Topping Mixture* — Min 3/4 or 1 in. thickness of floor topping mixture for 19/32 or 15/32 in. thick wood structural panels respectively, having a min compressive strength of 2100 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.
System No. 14
Subflooring — Min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.
Vapor Barrier — (Optional) - Commercial asphalt saturated felt, 0.030 in. thick.
Vapor Barrier — (Optional) - Nom 0.010 in. thick commercial rosin-sized building paper.
Finish Flooring* — Min 3/4 in. thickness of any Floor Topping Mixture bearing the UL Classification Marking as to Fire Resistance. See Floor- and Roof-Topping Mixtures (CCOX) category for names of Classified Companies. Refer to the manufacturer's instructions accompanying the material and/or contact the manufacturer's technical support for specific mix design and minimum thickness recommended for use with eligible floor mat(s).
Floor Mat Materials* — (Optional) - Nom. 1/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.
KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 55/025 and Quiet Qurl 55/025 N
Alternate Floor Mat Materials* — (Optional) - Floor mat material Nom. 3/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in.
KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 60/040 and Quiet Qurl 60/040 N
Alternate Floor Mat Materials* — (Optional) - Floor mat material Nom. 3/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1-1/2 in.
KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 65/075, Quiet Qurl 65/075 N
Alternate Floor Mat Materials* — (Optional) - Floor mat material Nom. 1/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.
KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 52/013 and Quiet Qurl 52/013 N
Alternate Floor Mat Materials* — (Optional) - Floor mat material Nom. 1/4 in. entangled net core with a compressible fabric attached to the bottom loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in.
KEENE BUILDING PRODUCTS CO INC — Quiet Qurl 55/025 MT and Quiet Qurl 55/025 N MT
System No. 15
Subflooring — Min 1 by 6 in. T & G lumber fastened diagonally to joists.
Vapor Barrier — Nom 0.010 in. thick commercial rosin-sized building paper.
Finish Flooring - Floor Topping Mixture* — Min 3/4 in. thickness of floor topping mixture having a min compressive strength of 1000 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.
ARCOSA SPECIALTY MATERIALS — AccuCrete® Types NexGen, Green, Prime and PrePour, AccuRadiant®, AccuLevel® Types G40, G50 and SD30
Floor Mat Material* — (Optional) - Floor mat material nominal 2 - 9.5 mm thick loose laid over the subfloor. Floor topping shall be a min of of 1 in.
ARCOSA SPECIALTY MATERIALS — AccuQuiet® Types D13, D-18, D25, DX38, EM.125, EM.125S, EM.250, EM.250S, EM.375, EM.375S, EM.750, and EM.750S
System No. 16
Subflooring — Min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.
Vapor Barrier - (Optional) — Nom 0.010 in. thick commercial rosin-sized building paper.
Finish Flooring - Floor Topping Mixture* — Min 3/4 floor topping mixture , having a min compressive strength of 1000 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.
DEPENDABLE LLC — GSL M3.4, GSL K2.6, GSL-CSD and GSL RH.
Floor Mat Materials* — (Optional) - Nom. 1/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.
KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 55/025 and Quiet Qurl 55/025 N
Alternate Floor Mat Materials* — (Optional) - Floor mat material Nom. 3/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in.
KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 60/040 and Quiet Qurl 60/040 N
Alternate Floor Mat Materials* — (Optional) - Floor mat material Nom. 3/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1-1/2 in.
KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 65/075, Quiet Qurl 65/075 N
Alternate Floor Mat Materials* — (Optional) - Floor mat material Nom. 1/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.
KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 52/013 and Quiet Qurl 52/013 N
Alternate Floor Mat Materials* — (Optional) - Floor mat material Nom. 1/4 in. entangled net core with a compressible fabric attached to the bottom loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in.
KEENE BUILDING PRODUCTS CO INC — Quiet Qurl 55/025 MT and Quiet Qurl 55/025 N MT
System No. 17
Subflooring — Min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.
Vapor Barrier — (Optional) - Commercial asphalt saturated felt, 0.030 in. thick.
Vapor Barrier — (Optional) - Nom 0.010 in. thick commercial rosin-sized building paper.
Finish Flooring* — Min 3/4 in. thickness of any Floor Topping Mixture bearing the UL Classification Marking as to Fire Resistance. See Floor- and Roof-Topping Mixtures (CCOX) category for names of Classified Companies.
Floor Mat Materials* — (Optional) - Nom 3/32 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.
PLITEQ INC — Type GenieMat RST02
Floor Mat Materials* — (Optional) - Nom 3/16 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.
PLITEQ INC — Type GenieMat FF03NP
Floor Mat Materials* — (Optional) - Nom 1/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.
PLITEQ INC — Type GenieMat FF06
Floor Mat Materials* — (Optional) - Nom 3/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in.
PLITEQ INC — Type GenieMat FF10
Floor Mat Materials* — (Optional) - Nom 3/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1-1/2 in.
PLITEQ INC — Type GenieMat FF17
Floor Mat Materials* — (Optional) - Nom 1 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1-1/2 in.
PLITEQ INC — Type GenieMat FF25
System No. 18
Subflooring — Building Units* — Nom 3/4 in. thick, tongue and grooved boards. Long dimension of boards to be perpendicular to joists with end joints staggered a min of 4 ft. and centered over the joists. Boards secured to joists with 2 in. long self-drilling, self- tapping screws or 2 in. x 0.113 in. Ring Shank nails spaced a max of 12 in. OC in the field with screws/nails located 1 in. from long edge, and max 8 in. OC along the end joints with screws/nails located 1/2 in. from end joint.
ECTEK INTERNATIONAL INC — Type MegaBoard
Vapor Barrier — Nom 0.010 in. thick commercial rosin-sized building paper.
Finish Flooring — Min 1 by 3 in. T & G and end matched.
System No. 19
Structural Cement-Fiber Units* — For use with UNITED STATES GYPSUM CO gypsum boards only. Nom 3/4 in. thick, with long edges tongue and grooved. Long dimension of panels to be perpendicular to wood trusses with end joints staggered a min of 2 ft and centered over the trusses. Panels secured to wood trusses with 1-5/8 in. long, No. 8, self-countersinking wood screw spaced a max of 12 in. OC in the field with a screw located 1 in. and 2 in. from each edge, and 8 in. OC on the perimeter with a screw located 2 in. from each edge, located 1/2 in. from the end edges of the panel.
UNITED STATES GYPSUM CO — Types STRUCTO-CRETE, USGSP
System No. 20
Subflooring — Min 1 by 6 in. T & G lumber fastened diagonally to joists.
Finish Flooring - Floor Topping Mixture* — Min 1 in. thickness of floor topping mixture having a min compressive strength of 4500 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.
SIKA DEUTSCHLAND GMBH — Type SCHONOX AP Rapid Plus
System No. 21
Subflooring - Building Units* — Nom. 1-1/2 in. thick T & G laminated composite plywood sub-floor panels to be perpendicular to the trusses with end joints staggered 4 ft. End joints centered over top chord of trusses. Subfloor panels secured to trusses with construction adhesive and #8 by 3 in. wood screws spaced 12 in. OC in the field and 6 in. OC at the end joints.
RSP INDUSTRIES INC — SAP board
System No. 22
Subflooring — Min 1 by 6 in. T & G lumber fastened diagonally to joists.
Vapor Barrier — (Optional) - Commercial asphalt saturated felt, 0.030 in. thick.
Vapor Barrier — (Optional) - Nom 0.010 in. thick commercial rosin-sized building paper.
Finish Flooring - Floor Topping Mixture* — Min 3/4 in. thickness of any Floor Topping Mixture bearing the UL Classification Marking as to Fire Resistance. See Floor- and Roof-Topping Mixtures (CCOX) category for names of Classified Companies.
Floor Mat Materials* — (Optional, Not Shown) - Floor mat material loose laid over the subfloor. Refer to manufacturer's instructions regarding the minimum thickness of floor topping over each floor mat material.
Freudenberg Performance Materials LP — EnkaSonic® by Colbond a member of the Low & Bonar group Types 125, 250, 250 Plus, 400, 400 Plus, 750, and 750 Plus.
Floor Mat Reinforcement — (Optional) - Refer to manufacturer's instructions regarding minimum thickness of floor topping for use with floor mat reinforcement.
Metal Lath — (Optional) — Expanded steel diamond mesh, 2.5 lb / sq yd loose laid over floor mat material.
Fiberglass Mesh Reinforcement — (Optional) — Coated non-woven glass fiber mesh grid loose laid over floor mat material.
System No. 23
Subflooring — Min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered. Fastened with 8d ringed shank nails spaced 12 in. OC along each joist.
Finish Floor - Building Units* — Min 1/2 in. thick, supplied in 4 by 8 ft panels, fastened to joists through subfloor with 2 in. long 8d ringed shank nails spaced 12 in. OC. All joints to be staggered a min of 12 in. with adjacent sub-floor joints.
ECTEK INTERNATIONAL INC — Type MegaBoard, 1/2 in. thick.
System No. 24
Subflooring - Building Units* — Nom. 1-3/16 in. thick T & G laminated composite plywood sub-floor panels to be perpendicular to the joist with end joints staggered 4 ft. End joints centered over top chord of joist. Subfloor panels secured to joist with construction adhesive and #8 by 2-3/8 in. wood screws spaced 12 in. OC in the field and 6 in. OC at the end joints.
RSP INDUSTRIES INC — SAP 1.0
System No. 25
Subflooring — Subflooring — Min 23/32 in. thick T&G wood structural panels, min grade "Underlayment" or "Single-Floor". Face grain of plywood or strength axis of panels to be perpendicular to the joists with end joints staggered.
Finish Floor - Building Units* — Min 1/2 in. thick magnesium oxide panels installed parallel, perpendicular, or diagonally to joists with panel edges offset a min of 4 in. between subfloor and magnesium oxide panels. Panels secured to subfloor with construction adhesive and corrosion-resistant fasteners spaced 6 in. OC around panel edges and 12 in. OC in the field of the panel. Fasteners must be placed no closer than 1/2 in. from all panel edges and no closer than 2 in. from panel corners.
HUBER ENGINEERED WOODS LLC — Type 1/2 in. and 5/8 in. Square Edge Exacor® Board,
Type ¾ in. T&G Exacor® Board.
System No. 26
Subflooring — Min 1 by 6 in. T & G lumber fastened diagonally to joists.
Finish Flooring - Floor Topping Mixture* — Min 3/4 in. thickness of floor topping mixture having a min compressive strength of 1000 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.
ALPHAGYP, LLC — Type AlphaGyp
Floor Mat Materials* — (Optional) — Nom. 1/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.
KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 55/025 and Quiet Qurl 55/025 N
Alternate Floor Mat Materials* — (Optional) — Floor mat material Nom. 3/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in.
KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 60/040 and Quiet Qurl 60/040 N
Alternate Floor Mat Materials* — (Optional) — Floor mat material Nom. 3/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1-1/2 in.
KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 65/075, Quiet Qurl 65/075 N
Alternate Floor Mat Materials* — (Optional) — Floor mat material Nom. 1/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.
KEENE BUILDING PRODUCTS CO INC — Type Quiet Qurl 52/013 and Quiet Qurl 52/013 N
Alternate Floor Mat Materials* — (Optional) — Floor mat material Nom. 1/4 in. entangled net core with a compressible fabric attached to the bottom loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in.
KEENE BUILDING PRODUCTS CO INC — Quiet Qurl 55/025 MT and Quiet Qurl 55/025 N MT
System No. 27
Subflooring — Min 1 by 6 in. T & G lumber fastened diagonally to joists.
Floor Mat Materials* — (Optional) — Any Floor Mat Material bearing the UL Classification Marking as to Fire Resistance. See Floor Mat Materials (CCQU) category for names of Classified Companies. Floor mat material loose laid over the subfloor. Refer to manufacturer's instructions regarding the minimum thickness of floor topping over each floor mat material.
Metal Lath — (Optional) — 3.4 lbs/sq yd expanded galvanized steel diamond lath. Refer to manufacturer's instructions regarding installation recommendations.
Finish Flooring - Floor Topping Mixture* — Min 3/4 in. thickness of floor topping mixture having a min compressive strength of 2500 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.
LATICRETE INTERNATIONAL INC — Type LAT
System No. 28
Subflooring — Min 1 by 6 in. T & G lumber fastened diagonally to joists.
Vapor Barrier – (Optional) — Nom 0.010 in. thick commercial rosin-sized building paper.
Finish Flooring - Floor Topping Mixture* — Min 1 in. thickness of floor topping mixture having a min compressive strength of 2500 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.
Apex Minerals LLC — Type Apex Multi Underlayment
2. Wood Joists — Min 2 by 10, spaced 16 in. OC and effectively fireblocked in accordance with local codes.
3. Cross Bridging — Min 1 by 3 in. or min 2 by 10 solid blocking.
4. Resilient Channels — Formed of 25 MSG galv steel, spaced 24 in. OC perpendicular to joists and located 12 in. from each side edge of base layer gypsum board. Channels placed with 1/4 in. clearance at the ends and fastened to each joist with 1-7/8 in. long Type S bugle head screws. Min end clearance of channels to walls: 3/8 in. Additional channels 60 in. long, placed adjacent to continuous channels at end joints of second layers of gypsum board (Item 5) and similarly secured. Channel ends to extend 6 in. beyond each side of joint. When used with Item 5A, channels spaced 12 in. OC. and additional channels at end joints not required.
4A. Steel Framing Members (Not Shown)* — As an alternate to Item 4, furring channels and Steel Framing Members as described below:
a. Furring Channels — Formed of No. 25 MSG galv steel. 2-9/16 in. or 2-23/32 in. wide by 7/8 in. deep, spaced 24 in. OC perpendicular to joists. Channels secured to joists as described in Item b. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap.
b. Steel Framing Members* — Used to attach furring channels (Item a) to joists. Clips spaced 48 in. OC., and secured to alternating joists with No. 8 x 2-1/2 in. coarse drywall screw through the center grommet. Furring channels are friction fitted into clips. RSIC-1 clip for use with 2-9/16 in. wide furring channels. RSIC-1 (2.75) clip for use with 2-23/32 in. wide furring channels. Adjoining channels are overlapped as described in Item a. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping No. 6 framing screws, min 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Additional clips required to hold furring channel that supports the gypsum board butt joints, as described in Item 5.
PAC INTERNATIONAL L L C — Types RSIC-1, RSIC-1 (2.75).
4B. Alternate Steel Framing Members* — (Not Shown) — As an alternate to items 4, furring channels and Steel Framing Members as described below.
a. Furring Channels — Formed of No. 25 MSG galv steel, 2-3/8 in. wide by 7/8 in deep, spaced 24 in OC, perpendicular to joists. Channels secured to joists as described in Item b. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap.
b. Steel Framing Members* — Used to attach furring channels (Item a) to the wood joists (Item 2). Clips spaced 48 in. OC., and secured to alternating joists with No. 8 x 2-1/2 in. coarse drywall screw through the center grommet. Furring channels are friction fitted into clips. Adjoining channels are overlapped as described in Item a. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping No. 6 framing screws, min 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Additional clips required to hold furring channel that supports the gypsum board butt joints, as described in Item 5.
PLITEQ INC — Type Genie Clip
4C. Alternate Steel Framing Members* — (Not Shown) - As an alternate to Item 4, furring channels and Steel Framing Members as described below.
a. Furring Channels — Formed of No. 25 MSG galv steel, 2-5/8 in. wide by 7/8 in deep, spaced 24 in OC, perpendicular to joists. Channels secured to joists as described in Item b.
b. Steel Framing Members* — Used to attach furring channels (Item a) to the wood joists (Item 2). Clips spaced at 48 in. OC and secured to the bottom of the joists with one 2 in. Coarse Drywall Screw with 1 in. diam washer through the center hole. Furring channels are then friction fitted into clips. Ends of channels are overlapped 6" and tied together with double strand of No. 18 AWG galvanized steel wire.Additional clips are required to hold the Gypsum Butt joints as described in Item 5.
STUDCO BUILDING SYSTEMS — RESILMOUNT Sound Isolation Clips - Type A237R
4D. Alternate Steel Framing Members* — (Not Shown) - As an alternate to Item 4, furring channels and Steel Framing Members as described below.
a. Furring Channels — Formed of No. 25 MSG galv steel, 2-1/2 in. wide by 7/8 in deep, spaced 24 in OC, perpendicular to joists. Channels secured to joists as described in Item b.
b. Steel Framing Members* — Used to attach furring channels (Item a) to the wood joists (Item 2). Clips spaced at 48 in. OC and secured to the bottom of the joists with one 2-1/2 in. Coarse Drywall Screw with 1 in. diam washer through the center hole. Furring channels are then friction fitted into clips. Ends of channels are overlapped 6" and tied together with double strand of No. 18 AWG galvanized steel wire. Additional clips are required to hold the Gypsum Butt joints as described in Item 5.
REGUPOL AMERICA — Type SonusClip
4E. Steel Framing Members* — (Not Shown)* — As an alternate to Item 4, furring channels and Steel Framing Members as described below:
a. Furring Channels — Formed of No. 25 MSG galv steel. 2-23/32 in. wide by 7/8 in. deep, spaced 24 in. OC perpendicular to joists. Channels secured to joists as described in Item b. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap.
b. Steel Framing Members* — Used to attach furring channels (Item a) to joists. Clips spaced 48 in. OC., and secured to alternating joists with No. 8 x 2-1/2 in. coarse drywall screw through the center grommet. Furring channels are friction fitted into clips.. Adjoining channels are overlapped as described in Item a. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping No. 6 framing screws, min 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Additional clips required to hold furring channel that supports the gypsum board butt joints, as described in Item 5.
CLARKDIETRICH BUILDING SYSTEMS — Type ClarkDietrich Sound Clip
4F. Steel Framing Members* — (Optional, Not Shown) — Used as an alternate method to attach resilient channels to structural members. A resilient sound isolation accessory shall be used at each attachment point of the resilient channels and spaced max 16 in. O.C. Channel ends butted and centered under the structural members and attached with one accessory at each end. Additional accessories used to hold resilient channels that support the gypsum board end joints. The accessory envelops the mounting edge of the resilient channel. The accessory and resilient channel are fastened to the structural members with the screws supplied with the accessory and per the accessory manufacturer's installation instructions.
PAC INTERNATIONAL L L C — Types RC-1 Boost
5. Gypsum Board* — Two layers of nom 5/8 in. thick, 4 ft wide gypsum board. When resilient channels (Item 4) are used, first layer installed perpendicular to joists with end joints located over bottom of joists. Gypsum board attached to joists with 6d cement coated cooler nails spaced 1 in., 6 in. and 21 in. from each side edge in the field of the board. Butt edges shall occur under joists, fastened with nails spaced 1 in., 6 in., 15 in. and 21 in. from side edges of board, and 1/2 in. back from butt edge. Second layer of gypsum board secured to resilient channels with 1 in. long Type S bugle head screws spaced 12 in. OC with additional screws placed 3 in. from each side edge. End joints of second layer offset from end joints in first layer, and secured to both resilient channels as shown in end joint detail. Screws located 3/4 in. and 1-1/4 in. from side and end joints of boards. When Steel Framing Members (Item 4A, 4B, 4E) are used, sheets installed with long dimensions parallel with joists. Base layer attached to the furring channels using 1 in. long Type S bugle head steel screws spaced 8 in. OC along butted end joints and 12 in. OC in the field of the board. Butted end joints shall be staggered min 2 ft. within the assembly, and occur midway between the continuous furring channels. Each end of each gypsum board shall be supported by a single length of furring channel equal to the width of the gypsum board plus 6 in. on each end. The two furring channels shall be spaced approximately 3-1/2 in. OC, and be attached to underside of the joist with one RSIC-1 or Genie clip at each end of the channel. Butted base layer end joints to be offset a min of 24 in. in adjacent courses. Outer layer attached to the furring channels using 1-5/8 in. long Type S bugle head steel screws spaced 8 in. OC at butted joints and 12 in. OC in the field. Butted end joints to be offset a min of 8 in. from base layer end joints. Butted side joints of outer layer to be offset min 18 in. from butted side joints of base layer. When Steel Framing Members (Item 4C) are used, base layer of gypsum board is installed with long dimensions perpendicular to furring channels. Gypsum board secured to furring channels with nom 1 in. long Type S bugle-head steel screws spaced 8 in. OC in the field of the board. Gypsum board butted end joints shall be staggered minimum 48 in. and centered over main furring channels. At the gypsum board butt joints, each end of each gypsum board shall be supported by a single length of furring channel equal to the width of the gypsum board plus 3 in. on each end. The two support furring channels shall be spaced approximately 3 in. in from joint. Screw spacing along the gypsum board butt joint and along both additional channels shall be 8 in. OC. Butt joint furring channels shall be attached with one RESILMOUNT Sound Isolation Clip at each end of the channel. Face layer installed per Item 5. When Steel Framing Members (Item 4D) are used, base layer of gypsum board is installed with long dimensions perpendicular to furring channels. Gypsum board secured to furring channels with nom 1 in. long Type S bugle-head steel screws spaced 8 in. OC in the field of the board. Gypsum board butted end joints shall be staggered minimum 48 in. and centered over main furring channels. At the gypsum board butt joints, an additional single length of furring channel shall be installed and be spaced approximately 3 in. from the butt joint (6 in. from the continuous furring channels) to support the floating end of the gypsum board. Each of these shorter sections of furring channel shall extend one joist beyond the width of the gypsum panel and be attached to the adjacent joists with one SonusClip at every joist involved with the butt joint.
AMERICAN GYPSUM CO — Type AG-C
CABOT MANUFACTURING ULC — 5/8 in. Type C.
CERTAINTEED GYPSUM INC — Type C
CGC INC — Types C, IP-X2, IPC-AR
GEORGIA-PACIFIC GYPSUM L L C — Types 5, DAPC, TG-C
NATIONAL GYPSUM CO — Types FSK-C, FSW-C, FSW-G
PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type C
PANEL REY S A — Type PRC
THAI GYPSUM PRODUCTS PCL — Type C
UNITED STATES GYPSUM CO — Types C, IP-X2, IPC-AR
USG BORAL DRYWALL SFZ LLC — Type C
USG MEXICO S A DE C V — Types C, IP-X2, IPC-AR
5A. Gypsum Board* — As an alternate to Item 5 - Three layers of 5/8 in. thick by 4 ft wide gypsum board. Base layer boards installed with long dimension perpendicular to trusses with end joints located under bottom of joists. End joints in adjacent rows staggered on adjacent trusses. Base layer boards secured to bottom of joist with 1-5/8 in. long Type W screws, spaced max 8 in. OC. Bottom two layers of gypsum board installed perpendicular to furring channels (Item 4) with end joints centered on the furring channels. Midde layer end joints in adjacent rows staggered min. 4 ft. Middle layer boards secured to each furring channel with 1 or 1-1/4 in. long Type S bugle head steel screws spaced max 8 in. OC. Face layer boards secured to each furring channel through the middle layer with 1-5/8 or 1-7/8 in. long Type S-12 bugle head steel screws, spaced a max of 8 in. OC. End joints and side joints of the face layer boards shall be staggered a min of 24 in. from the joints in the middle layer.
NATIONAL GYPSUM CO — Type FSLX
6. Finishing System - (Not Shown) — Vinyl, dry or premixed joint compound, applied in two coats to joints and screw-heads. Nom 2 in. wide paper tape embedded in first layer of compound over all joints. As an alternate, nom. 3/32 in. thick veneer plaster may be applied to the entire surface of the gypsum board.

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

Last Updated on 2026-01-19

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FIRE RATING FOR 2 HOUR FLOOR/CEILING ASSEMBLY
U.L. DESIGN NO. L511

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CREEK MANOR

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LAWRENCEBURG, IN 47025

DRAWING TITLE:

FIRE RESISTANCE
RATINGS

DATE: 06/26/2026
REVISED:

GEORGE J. KONTOGIANNIS REGISTERED No. AR00034309 STATE OF INDIANA ARCHITECT

GEORGE J. KONTOGIANNIS, LICENSE #AR00034309
EXPIRATION DATE 12/31/2027

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- ☐ SUBMISSION SET 06/27/2025
- ☐ ZONING SET 05/07/2026
- ■ BID SET 06/26/2026
- ☐ PERMIT SET
- ☐ CONSTRUCTION SET

FR-5

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Design No. U301

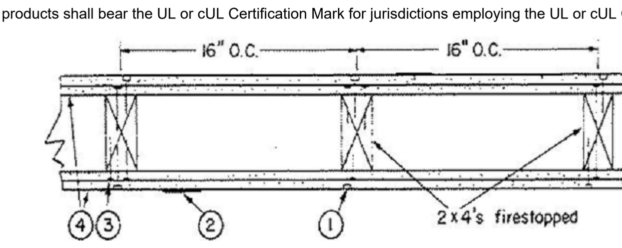
March 30, 2026

Bearing Wall Rating — 2 Hr.

Finish Rating — 66 Min.

This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be used — See Guide BXUV or BXUV7

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.




1. Nailheads — Exposed or covered with joint compound.
2. Joints — Exposed joints covered with joint compound and paper tape. Joint compound and paper tape may be omitted when square edge boards are used. As an alternate, nom 3/32 in. thick gypsum veneer plaster may be applied to the entire surface of Classified veneer baseboard with the joints reinforced with paper tape.
3. Nails — 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam, 1/4 in. diam heads, and 8d cement coated nails 2-3/8 in. long, 0.113 in. shank diam, 9/32 in. diam heads.
4. Gypsum Board* — 5/8 in. thick, two layers applied either horizontally or vertically. Inner layer attached to studs with the 1-7/8 in. nails spaced 6 in. OC. Outer layer attached to studs over inner layer with the 2-3/8 in. long nails spaced 8 in. OC. Vertical joints located over studs. All joints in face layers staggered with joints in base layers. Joints of each base layer offset with joints of base layer on opposite side.

When used in widths other than 48 in., gypsum board to be installed horizontally.

When Steel Framing Members* (Item 6 or any alternate clips) are used, base layer attached to furring channels with 1 in. long Type S bugle-head steel screws spaced max 24 in. OC; face layer attached with 1-5/8 in. long Type S bugle-head steel screws spaced max 12 in. OC.

AMERICAN GYPSUM CO — Types AGX-1, M-Glass, AG-C, AGX-11, LightRoc

BEIJING NEW BUILDING MATERIALS PUBLIC LTD CO — Type DBX-1

CABOT MANUFACTURING ULC — Type X, 5/8 Type X, Moisture Resistant Type X, Gypsum Sheathing Type X, Mold & Mildew Resistant Type X and Mold & Mildew Resistant AR Type X, Type Blueglass Exterior Sheathing, 5/8 in. Type C.

CERTAINTEED GYPSUM INC — Types EGRG, GlasRoc Type C, Type X-1, Type LWTX

CGC INC — Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, ULIX, ULX, USGX, WRC, WRX

GEORGIA-PACIFIC GYPSUM L L C — Types 5, 6, 9, C, DAP, DD, DA, DAPC, DGG, DS, GPFS6. LS, TG-C, Type X, Veneer Plaster Base-Type X, Water Rated-Type X, Sheathing Type-X, Soffit-Type X, GreenGlass Type X, Type LWX, Veneer Plaster Base-Type LWX, Water Rated-Type LWX, Sheathing Type-LWX, Soffit-Type LWX, Type DGLW, Water Rated-Type DGLW, Sheathing Type- DGLW, Soffit-Type DGLW, Type LW2X, Veneer Plaster Base - Type LW2X, Water Rated - Type LW2X, Sheathing - Type LW2X, Soffit - Type LW2X, Type DGL2W, Water Rated - Type DGL2W, Sheathing - Type DGL2W

NATIONAL GYPSUM CO — Types eXP-C, FSK, FSK-C, FSK-G, FSW, FSW-3, FSW-5, FSW-6, FSW-8, FSW-C, FSW-G, FSMR-C, FSL, RSX, FSLX

NATIONAL GYPSUM CO — Riyadh, Saudi Arabia — Type FR, or WR.

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Types C, PG-2, PG-3, PG-3W, PG-4, PG-5, PG-5W, PG-5WS, PG-9, PG-11, PG-C, PGS-WRS, PGI

PANEL REY S A — Types PRC, PRC2, PRX, RHX, MDX, ETX, GREX, GRIX

SIAM GYPSUM INDUSTRY (SARABURI) CO LTD — Type EX-1

THAI GYPSUM PRODUCTS PCL — Type C or Type X

UNITED STATES GYPSUM CO — Types AR, C, FRX-G, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, ULIX, ULX, USGX, WRC, WRX

USG BORAL DRYWALL SFZ LLC — Types C, SCX, USGX

USG MEXICO S A DE C V — Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX

4A. Gypsum Board* — (As an alternate to Item 4) — Nom 3/4 in. thick, installed as described in Item 4.

CGC INC — Types AR, IP-AR

UNITED STATES GYPSUM CO — Types AR, IP-AR

USG MEXICO S A DE C V — Types AR, IP-AR

4B. Gypsum Board* — (As an alternate to Items 4 and 4A) — 5/8 in. thick, 2 ft wide, tongue and groove edge, applied horizontally as the outer layer to one side of the assembly. Secured as described in Item 4. Joint covering (Item 2) not required.

CGC INC — Type SHX

UNITED STATES GYPSUM CO — Type SHX

USG MEXICO S A DE C V — Type SHX

4C. Gypsum Board* — (As an alternate to Items 4, 4A or 4B — Not Shown) — For Direct Application to Studs Only- For use on one or both sides of the wall as the base layer or one or both sides of the wall as the face layer. Nom 5/8 in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Wallboard secured to studs with 1-5/8 in. long Type W coarse thread gypsum panel steel screws spaced 8 in. OC at perimeter and in the field when applied as the base layer. When applied as the face layer screw length to be increased to 2-1/2 in. Lead batten strips required behind vertical joints of lead backed gypsum wallboard and optional at remaining stud locations. Lead batten strips, min 1-1/2 in. wide, max 10 ft long with a max thickness of 0.125 in. placed on the face of studs and attached to the stud with two 1 in. long Type S-12 pan head steel screws, F4j.one at the top of the strip and one at the bottom of the strip. Lead discs or tabs may be used in lieu of or in addition to the lead batten strips or optional at other locations. Max 3/4 in. diam by max 0.125 in. thick lead discs compression fitted or adhered over steel screw heads or max 1/2 in. by 1-1/4 in. by max 0.125 in. thick lead tabs placed on gypsum boards underneath screw locations prior to the installation of the screws. Lead batten strips to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C". Fasteners for face layer gypsum panels (Items 4, 4A or 4B) when installed over lead backed board to be min 2-1/2 in. Type S-12 bugle head steel screws spaced as described in Item 4.

RAY-BAR ENGINEERING CORP — Type RB-LBG.

4D. Gypsum Board* — As an Alternate to Item 4 — 5/8 in. thick applied either horizontally or vertically. Inner layers fastened to framing with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a max 8 in. OC, with last screw 1 in. from edge of board. Outer layers fastened to framing with 1-7/8 in. long Type W coarse thread gypsum panel steel screws spaced a max 8 in. OC, with last screw 1 in. from edge of board. When used in widths other than 48 in., gypsum board to be installed horizontally. All joints in face layers staggered with joints in base layers. Joints of each base layer offset with joints of base layer on opposite side.

AMERICAN GYPSUM CO — Types AGX-1, M-Glass, AG-C, LightRoc

4E. Gypsum Board* — (As an alternate to Items 4 through 4D) — 5/8 in. thick, 4 ft. wide, paper surfaced applied vertically and secured as described in Item 4.

GEORGIA-PACIFIC GYPSUM L L C — Type X ComfortGuard Sound Deadening Gypsum Board

4F. Gypsum Board* — (As an alternate to Item 4) — Not to be used with item 6, 6A, 6B or 6C. 5/8 in. thick, 4 ft. wide, paper surfaced, applied vertically and secured as described in Item 4.

NATIONAL GYPSUM CO — Type SBWB

4G. Gypsum Board * — (As an alternate to Items 4 through 4F) — Nominal 5/8 in. thick, 4 ft wide panels, applied vertically and secured as described in Item 4.

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Types QuietRock ES

4H. Gypsum Board* — (As an alternate to Item 4) — Not to be used with item 6, 6A, 6B, or 6C. 5/8 in. thick, 4 ft. wide, paper surfaced, applied vertically or horizontally and secured as described in Item 4.

CERTAINTEED GYPSUM INC — Type SilentFX

4I. Gypsum Board* — (As an alternate to item 4) — 5/8 in. thick, two layers applied either horizontally or vertically. Inner layer attached to studs with 1-1/4 in. long Type W steel screws spaced 8 in. OC. Outer layer attached to studs over inner layer with 2 in. long Type W steel screws spaced 8 in. OC offset 6 in. from base layer. Vertical joints located over studs. Vertical and horizontal joints between inner and outer layers staggered. Outer layer joints covered with joint tape and compound, screwheads covered with joint compound. As an alternate to the joint compound nom 3/32 in. thick gypsum veneer plaster may be applied to the entire surface of Classified veneer baseboard. Joints reinforced. Wallboard other than 48 in. wide must be applied horizontally. The SoundBreak XP Type X Gypsum Board is not to be used with Item 6, 6A, 6B, or 6C.

NATIONAL GYPSUM CO — Types eXP-C, FSK, FSK-C, FSK-G, FSW, FSW-3, FSW-5, FSW-6, FSW-C, FSW-G, FSMR-C, SBWB

4J. Gypsum Board* — (As an alternate to Items 4) — For Direct Application to Studs Only- For use as the base layer or as the face layer. Nom 5/8 in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Wallboard secured to studs with 1-5/8 in. long Type W coarse thread gypsum panel steel screws spaced 8 in. OC at perimeter and in the field when applied as the base layer. When applied as the face layer screw length to be increased to 2-1/2 in. Lead batten strips required behind vertical joints of lead backed gypsum wallboard and optional at remaining stud locations. Lead batten strips, min 2 in. wide, max 10 ft long with a max thickness of 0.140 in. placed on the face of studs and attached to the stud with two 1 in. long Type S-8 pan head steel screws, one at the top of the strip and one at the bottom of the strip. Lead discs, max 5/16 in. diam by max 0.140 in. thick. compression fitted or adhered over the screw heads. Lead batten strips and discs to have a purity of 99.5% meeting the Federal specification QQ-L-201f, Grades "B, C or D". Fasteners for face layer gypsum panels (Items 4, 4A or 4B) when installed over lead backed board to be min 2-1/2 in. Type S-12 bugle head steel screws spaced as described in Item 4.

MAYCO INDUSTRIES INC — "X-Ray Shielded Gypsum"

4K. Gypsum Board* — For use with Item 7 — 5/8 in. thick, two layers applied vertically. Inner layer attached to resilient channels with 1 in. long steel screws spaced 8 in. OC. Outer layer attached to resilient channels over inner layer with 1-5/8 in. long steel screws spaced 8 in. OC. All joints in face layers staggered with joints in base layers. Joints of each base layer offset with joints of base layer on opposite side. Insulation, Items 8 or 9 is required.

AMERICAN GYPSUM CO — Types AGX-1, M-Glass, AG-C, AGX-11

NATIONAL GYPSUM CO — Types eXP-C, FSK, FSK-C, FSK-G, FSW, FSW-3, FSW-5, FSW-6, FSW-C, FSW-G, FSMR-C, SBWB.

CERTAINTEED GYPSUM INC — Types EGRG, GlasRoc Type C, Type X-1, SilentFX

4L. Gypsum Board* — (As an alternate to Items 4) — For Direct Application to Studs Only- For use as the base layer or as the face layer. Nom 5/8 in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Wallboard secured to studs with 1-5/8 in. long Type W coarse thread gypsum panel steel screws spaced 8 in. OC at perimeter and in the field when applied as the base layer. When applied as the face layer screw length to be increased to 2-1/2 in. Lead batten strips required behind vertical joints of lead backed gypsum wallboard and optional at remaining stud locations. Lead batten strips, min 2 in. wide, max 8 ft long with a max thickness of 0.14 in. placed on the face of studs and attached to the stud with construction adhesive and two 1 in. long Type S-12 pan head steel screws, one at the top of the strip and one at the bottom of the strip. Lead discs, nominal 3/8 in. diam by max 0.085 in. thick. compression fitted or adhered over the screw heads. Lead batten strips and discs to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C". Fasteners for face layer gypsum panels (Items 4, 4A or 4B) when installed over lead backed board to be min 2-1/2 in. Type S-12 bugle head steel screws spaced as described in Item 4.

RADIATION PROTECTION PRODUCTS INC — Type RPP - Lead Lined Drywall

4N. Gypsum Board* — (As an alternate to 5/8 in. Type FSW in Items 4 or 4I) — Nom. 5/16 in. thick gypsum panels applied vertically or horizontally. Two layers of 5/16 in. for every single layer of 5/8 in. gypsum board described in Item 4 or 4I. Horizontal joints on the same side need not be staggered. Inner layer of each double 5/16 in. layer attached with fasteners, as described in item 4 or 4I, spaced 24 in. OC. Outer layer of each double 5/16 in. layer attached per Item 4 or 4I.

NATIONAL GYPSUM CO — Type FSW

4O. Wall and Partition Facings and Accessories* — (As an alternate to Items 4 through 4N) — Nominal 5/8 in. thick, 4 ft wide panels, applied vertically and secured as described in Item 4.

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type QuietRock 527

4Q. Gypsum Board* — (As an alternate to Item 4. For use with Item 13) — Any 5/8 in. thick, 4 ft. wide, Gypsum Board UL Classified for Fire Resistance (CKNX) eligible for use in Design Nos. U305 and L501 or G512. Two layers, applied either horizontally or vertically, and screwed to studs with 1-5/8 in. long Type W coarse thread steel screws at 8 in. OC at perimeter and in the field with the last two screws 4 and 3/4 in. from the edges of the board when applied as the base layer. For the face layer, screw length to be increased to 2-1/2 in. All joints in face layers staggered with joints in base layers. When used in widths other than 48 in., gypsum panels are to be installed horizontally.

4R. Gypsum Board* — As an Alternate to Item 4 — 5/8 in. thick applied either horizontally or vertically. Inner layers fastened to framing with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a max 8 in. OC, with last screw 1 in. from edge of board. Outer layers fastened to framing with 1-7/8 in. long Type W coarse thread gypsum panel steel screws spaced a max 8 in. OC, with last screw 1 in. from edge of board. When used in widths other than 48 in., gypsum board to be installed horizontally. All joints in face layers staggered with joints in base layers. Joints of each base layer offset with joints of base layer on opposite side.

CERTAINTEED GYPSUM INC — Types EGRG, GlasRoc, Type C, Type X-1, SilentFX

4S. Gypsum Board* — (As an alternate to Item 4. For use with Item 13A) — 5/8 in. thick, two layers applied vertically. Inner layer attached to studs with the 1-7/8 in. nails spaced 6 in. OC. Outer layer attached to studs over inner layer with the 2-3/8 in. long nails spaced 8 in. OC. Vertical joints located over studs. All joints in face layers staggered with joints in base layers. Joints of each base layer offset with joints of base layer on opposite side.

AMERICAN GYPSUM CO — Types AGX-1

BEIJING NEW BUILDING MATERIALS PUBLIC LTD CO — Type DBX-1

CABOT MANUFACTURING ULC — "5/8 Type X"

CGC INC — Type SCX

PANEL REY S A — Type PRX

SIAM GYPSUM INDUSTRY (SARABURI) CO LTD — Type EX-1

THAI GYPSUM PRODUCTS PCL — Type X

UNITED STATES GYPSUM CO — Type SCX

USG BORAL DRYWALL SFZ LLC — Types SCX

USG MEXICO S A DE C V — Type SCX

4T. Gypsum Board* — (As an alternate to Item 4. For use with Item 13B) — Any 5/8 in. thick, 4 ft. wide, Gypsum Board listed in Item 4 above. Two layers applied vertically with vertical joints centered over studs and staggered one stud cavity on opposite sides of studs. All joints in outer layers staggered with joints in inner layers. Inner layer attached to studs with 1-5/8 in. long Type W coarse thread gypsum panel steel screws spaced 8 in. OC at perimeter and in the field. Outer layer attached to studs over inner layer with the 2-1/2 in. long Type W coarse thread gypsum panel steel screws spaced 8 in. OC.

4U. Gypsum Board* — (As an alternate to Item 4. For use with Item 13C) — Any 5/8 in. thick, 4 ft. wide, Gypsum Board listed in Item 4 above. Two layers applied vertically with vertical joints centered over studs and staggered one stud cavity on opposite sides of studs. All joints in outer layers staggered with joints in inner layers. Inner layer attached to studs with 1-1/4 in. long Type W screws spaced 8 in. OC at perimeter and in the field. Outer layer attached to studs over inner layer with 1-7/8 in. long Type W screws spaced 8 in. OC.

4V. Gypsum Board* — (As an alternate to Item 4. For use with Item 13D) – Any 5/8 in. thick, 4 ft. wide, Gypsum Board listed in Item 4 above. Three layers applied vertically with vertical joints centered over studs and staggered one stud cavity on opposite sides of studs. All joints in outer layers staggered with joints in inner layers. Inner layer attached to studs with 1-1/4 in. long Type W screws spaced 8 in. OC at perimeter and in the field. Middle layer attached to studs over inner layer with 1-7/8 in. long Type W screws spaced 8 in. OC. Outer layer attached to studs over middle layer with 2-5/8 in. long Type W screws spaced 8 in. OC.

5. Molded Plastic* — Not Shown, Optional — Solid vinyl siding mechanically secured over the outer layer to framing members in accordance with manufacturer's recommended installation details.

ALSIDE, DIV OF ASSOCIATED MATERIALS INC

GENTEK BUILDING PRODUCTS LTD

VYTEC CORP

6. Steel Framing Members* — (Optional, Not Shown) — Furring channels and Steel Framing Members as described below:

A. Furring Channels — Formed of No. 25 MSG galv steel. 2-9/16 in. or 2-23/32 in. wide by 7/8 in. deep, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping #6 framing screws, min. 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Wallboard attached to furring channels as described in Item 4.

B. Steel Framing Members* — Used to attach furring channels (Item 6a) to studs. Clips spaced 48 in. OC., and secured to studs with No. 8 x 2-1/2 in. coarse drywall screw through the center grommet. Furring channels are friction fitted into clips. RSIC-1 clip for use with 2-9/16 in. wide furring channels. RSIC-1 (2.75) clip for use with 2-23/32 in. wide furring channels.

PAC INTERNATIONAL L L C — Types RSIC-1, RSIC-1 (2.75)

6A. Steel Framing Members* — (Optional, Not Shown, As an alternate to Item 6) — Furring channels and Steel Framing Members as described below:

A. Furring Channels — Formed of No. 25 MSG galv steel. Spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 AWG galvanized steel wire. Gypsum board attached to furring channels as described in Item 4.

B. Steel Framing Members* — Used to attach furring channels (Item 6Aa) to studs. Clips spaced 48 in. OC., and secured to studs with 2 in. coarse drywall screw with 1 in. diam washer through the center hole. Furring channels are friction fitted into clips.

STUDCO BUILDING SYSTEMS — RESILMOUNT Sound Isolation Clips - Type A237R

6B. Steel Framing Members* — (Optional, Not Shown, As an alternate to Item 6) — Furring channels and Steel Framing Members as described below:

A. Furring Channels — Formed of No. 25 MSG galv steel. Spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item 6Bb. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 AWG galvanized steel wire. Gypsum board attached to furring channels as described in Item 4.

B. Steel Framing Members* — Used to attach furring channels (Item 6Ba) to studs. Clips spaced 48 in. OC., and secured to studs with 2-1/2 in. coarse drywall screw through the center hole. Furring channels are friction fitted into clips.

REGUPOL AMERICA — Type SonusClip

6C. Steel Framing Members* — (Optional, Not Shown, As an alternate to Item 6) —Resilient channels and Steel Framing Members as described below:

a. Resilient Channels — Formed of No. 25 MSG galv steel, spaced 24 in. OC, and perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels overlapped 6 in. and secured in place with two No. 8 15 x 1/2 in. Philips Modified Truss screws spaced 2-1/2 in. from the center of the overlap. Gypsum board attached to resilient channels as described in Item 4.

b. Steel Framing Members* — Used to attach resilient channels (Item 6Ca) to studs. Clips spaced 48 in. OC., and secured to studs with No. 8 x 2-1/2 in. coarse drywall screw through the center hole. Resilient channels are secured to clips with one No. 10 x 1/2 in. pan-head self-drilling screw.

KEENE BUILDING PRODUCTS CO INC — Type RC+ Assurance Clip

6D. Steel Framing Members* — (Optional, Not Shown, As an alternate to Item 6) — Used as an alternate method to attach resilient channels to wall studs. A resilient sound isolation accessory shall be used at each attachment point of the resilient channels and spaced max 24 in. O.C. Channel ends butted and centered under the structural members and attached with one accessory at each end. Additional accessories used to hold resilient channels that support the gypsum board end joints. The accessory envelops the mounting edge of the resilient channel. The accessory and resilient channel are fastened to the structural members with the screws supplied with the accessory and per the accessory manufacturer's installation instructions.

PAC INTERNATIONAL L L C — Type RC-1 Boost

6E Steel Framing Members* — (Optional, Not Shown, As an alternate to Item 6) — Furring channels and Steel Framing Members as described below:

a Furring Channels — Formed of No. 25 MSG galv steel. 2-23/32 in. wide by 7/8 in. deep, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping #6 framing screws, min. 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Gypsum board attached to furring channels as described in Item 4.

b Steel Framing Members* — Used to attach furring channels (Item 6Ea) to studs. Clips spaced maximum 48 in. OC. Clips secured to studs with No. 8 x 2-1/2 in. coarse drywall screw through the center grommet. Furring channels are friction fitted into clips.

CLARKDIETRICH BUILDING SYSTEMS — Type ClarkDietrich Sound Clip

7. Furring Channel — Optional — Not Shown — For use on one side of the wall with Item 4K — Resilient channels, 25 MSG galv steel, spaced vertically 24 in. OC, flange portion screw attached to one side of studs with 1-1/4 in. long diamond shaped point, double lead Phillips head steel screws. When resilient channels are used, insulation, Item 8 or 9 is required.

8. Batts and Blankets* — Required for use with resilient channels, Item 7, min. 3 in. thick mineral wool batts, placed to fill interior of wall, attached to the nom 4 in. face of the studs with staples placed 24 in. OC.

ROCKWOOL — Type SAFEnSOUND, min. 1.8 pcf.

THERMAFIBER/OWENS CORNING — Type SAFB, SAFB FF

9. Batts and Blankets* — (As an alternate to Item 8) — Min. 3 in. thick glass fiber batts bearing the UL Classification Marking as to Surface Burning and/or Fire Resistance, friction-fitted to fill the stud cavities. See Batts and Blankets (BKNV or BZJZ) Categories for names of Classified companies.

9A. Fiber, Sprayed* — (Optional) — As an alternate to Batts and Blankets (Item 8), Required for use with resilient channels, Item 7, Not for use with Item 6, 6A, 6B, or 6C. — Spray applied mineral wool insulation. The fiber is applied with adhesive, at a minimum density of 4.0 pcf, to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. See Fiber, Sprayed (CCAZ).

AMERICAN ROCKWOOL MANUFACTURING, LLC — Type Rockwool Premium Plus

9B. Loose Fill Material* – Optional - (As an alternate to Items 8, 9, and 9A) - Shredded glass fibers bearing the UL Classification Marking as to Surface Burning. Blown into wall cavities through pre-installed fabric stapled or adhered to studs.

CERTAINTEED LLC – Type InsulSafe R, InsulSafe SP, InsulSafe XC, Northern White,or OPTIMA

10. Wall and Partition Facings and Accessories* — (Optional, Not Shown) — Nominal 1/2 in. thick, 4 ft wide panels, for optional use as an additional layer on one or both sides of the assembly. Panels attached in accordance with manufacturer's recommendations. When the QR-500 or QR-510 panel is installed between the wood framing and the UL Classified gypsum board, the required UL Classified gypsum board layer(s) is/are to be installed as indicated as to fastener type and spacing, except that the required fastener length shall be increased by a minimum of 1/2 in. Not evaluated or intended as a substitute for the required layer(s) of UL Classified Gypsum Board.

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type QuietRock QR-500 or QR-510

11. Cementitious Backer Units* — (Optional Item Not Shown — For Use On Face Of 2 Hr Systems With All Standard Items Required) — 7/16 in., 1/2 in., 5/8 in., 3/4 in. or 1 in. thick, min. 32 in. wide. Applied horizontally or vertically with vertical joints centered over studs. Face layer fastened over gypsum board to studs and runners with cement board screws of adequate length to penetrate stud by a minimum of 3/8 in. for steel framing members, and a minimum of 3/4 in. for wood framing members spaced a max of 8 in. OC.

NATIONAL GYPSUM CO — Type DuraBacker, PermaBase, DuraBacker Plus, or PermaBase Plus

12. Wall and Partition Facings and Accessories* — (Optional, Not Shown) - When the Wall Assembly is used as an External Wall, on the External side of the wall one of the following Wall and Partition and Facing Accessories may be used, refer to items (A) to (C) below.

A. Non Insulated system with metal channels — Install moisture barrier over the Gypsum Board Item 4 and Install Acry Metal Channels vertically at a horizontal spacing not greater than 24 inches OC., over the moisture barrier. Acry Metal Channels attached through the moisture barrier and the Gypsum Board to the Wood Studs using fasteners specified by the manufacturer and fasteners spaced max., 24 in. OC. Install Acrytec Panels on Acry Metal Channels using 1-1/4" long corrosion coated stainless steel screws spaced at a max spacing of 24 inches OC, along with manufacturer's approved adhesive (3M 540 or Tremco Vulcum 116). Adhesive to be applied in a zigzag pattern along every channel. Joint treatment in between panels shall be Tremco illmod 600 pre compressed polyurethane foam sealant.

B. Insulated system with metal channels — Install moisture barrier over the Gypsum Board Item 4. Install galvanized Z girt channels specified by the manufacturer over the moisture barrier and the Gypsum Board Item 4. Z girt channels to be installed horizontally at a max. spacing of 24" OC. Z girt channels attached through the Gypsum Board and the moisture barrier to the wood studs with screws provided by the manufacturer at a max spacing of 24 inches OC. Install mineral wool insulation between the Z girts. Maximum thickness of mineral wool insulation not to exceed 6 in. As per manufacturer's instructions install Acry Metal Channels vertically over the Z girts at a max horizontal spacing of 24 in. OC. Acrytec Panels installed on Acry channel with 1-1/4" long corrosion coated stainless steel screws at a max spacing of 24 in. OC, along with manufacturers approved adhesive (3M 540 or Tremco Vulcum 116). Adhesive to be applied in a zigzag pattern along every channel. Joint treatment in between panels to be Tremco illmod 600 pre compressed polyurethane foam sealant.

C. Non insulated wood strapping system — Install moisture barrier over the Gypsum Board Item 4 and Install 1" x 3" wood strapping vertically at a horizontal spacing not greater than 24 inches OC., over the moisture barrier. 1" x 3" wood strapping attached through the moisture barrier and the Gypsum Board to the Wood studs using fasteners specified by the manufacturer and fasteners spaced max., 24 in. OC. Acrytec Panels to be installed on the 1" x 3" wood strapping using manufacturers approved stainless steel fasteners spaced at maximum 24 inches OC along with Tremco Vulcum 116 adhesive applied in a zigzag pattern along every wood strap. Joint treatment in between panels to be Tremco illmod 600 pre compressed polyurethane foam sealant.

D. Insulated Wood Strapping System — Install moisture barrier over the Gypsum Board Item 4. Install Extruded Polystyrene Insulation over moisture barrier and the Gypsum Board Item 4, max thickness of insulation not to exceed 4 inches. Install 1" x 3" wood strapping vertically at a horizontal spacing not greater than 24 inches OC. Wood strapping attached through the Insulation, the Gypsum Board and moisture barrier to the Wood Studs using fasteners specified by the manufacturer and fasteners spaced max. 24 in. OC. Acrytec Panels to be installed over the wood strapping using manufacturers approved stainless steel fasteners at a max spacing of 24 in. OC and Tremco Vulcum 116 adhesive applied in a zigzag pattern along every wood strap. Joint treatment in between panels to be Tremco illmod 600 pre compressed polyurethane foam sealant.

ACRYTEC PANEL INDUSTRIES — Nominal 5/8 inch thick Acrytec Panel.

E. Foamed Plastic* — (Not shown) — Optional with 12D — Extruded polystyrene insulation over moisture barrier and the Gypsum Board Item 4, max thickness of insulation not to exceed 4 inches.

BASF CORP STYRENIC FOAMS DIV - Neopor® GPS and NeoTherm GPS.

13. Foamed Plastic* — (Optional, Not Shown - For use with Item 4Q) — Spray applied, foamed plastic insulation, at any thickness from partial fill to completely filling stud cavity.

Amrize Building Envelope LLC — Nexseal™ 2.0, Onepass HFO or Nexseal™ 2.0 LE Spray Foam and Enverge SucraSeal. For use in Bearing and Non-Load Bearing Walls.

13A. Foamed Plastic* — (Optional, Not Shown - For use with Item 4S) — Spray applied, foamed plastic insulation, at any thickness from partial fill to completely filling stud cavity.

Amrize Building Envelope LLC — Types GacoEZSpray F4500, GacoProFill FR6500R, Gaco 052N, GacoOnePass F1850, GacoOnePass Low GWP F1880, and Gaco WallFoam 183M.

13B. Foamed Plastic* — (Optional, Not Shown - For use with Item 4T) — Spray applied, foamed plastic insulation, at any thickness from partial fill to completely filling stud cavity.

CARLISLE SPRAY FOAM INSULATION — Types SealTite ONE, SealTite Pro Closed Cell (CC), SealTite Pro Open Cell (OC), SealTite Pro OCX, SealTite Pro No Trim 21, SealTite Pro One Zero, Foamsulate Closed Cell, Foamsulate OCX, Foamsulate 70, and Foamsulate HFO.

13C. Foamed Plastic* - (Optional, Not Shown – For use with Item 4U) - Spray applied, foamed plastic insulation, at any thickness from partial fill to completely filling stud cavity.

BASF CORP – Types Enertite® G, Walltite® MAX, Walltite® One, and Enertite® Max

13D. Foamed Plastic* - (Optional, Not Shown – For use with Item 4V) - Spray applied, foamed plastic insulation, at any thickness from partial fill to completely filling stud cavity.

BASF CORP – Type Walltite® v.5

14. Foamed Plastic* — (Optional, Not Shown - For use over Gypsum Board, Item 4) - Polyisocyanurate foamed plastic boards, any thickness applied vertically with vertical joints located over studs. May be used with Molded Plastic, Item 5 or any exterior facing, as authorized by the Authority Having Jurisdiction and installed in accordance with the manufacturer's installation instructions.

HUNTER PANELS, A DIVISION OF CARLISLE CONSTRUCTION MATERIALS, LLC — "Xci Class A", "Xci 286", "Xci Foil (Class A)", "Xci CG", "Xci Foil", "Xci CG NH", "Xci Foil NH"

ATLAS ROOFING CORP — “EnergyShield®”, “EnergyShield® CGF”, “EnergyShield® XR”, “EnergyShield® Pro Wall Insulation”, “EnergyShield® CGF Pro”, “EnergyShield® Ply Pro”

15. Building Units* — (Optional, Not Shown - For use over Gypsum Board, Item 4) Polyisocyanurate composite foamed plastic boards, any thickness, applied vertically with vertical joints located over studs. May be used with Molded Plastic, Item 5 or any exterior facing, as authorized by the Authority Having Jurisdiction and installed in accordance with the manufacturer's installation instructions.

HUNTER PANELS, A DIVISION OF CARLISLE CONSTRUCTION MATERIALS, LLC — "Xci NB", "Xci Ply"

ATLAS ROOFING CORP — “EnergyShield® Ply”

16. Building Units – (Optional Item Not Shown – For use over Gypsum Board, Item 4) 1 in., 2 in. or 3 in. thick, 4 ft. wide – Applied vertically or horizontally with vertical joints centered over studs. Fastened to studs and runners with wafer head screws of adequate length to penetrate framing by a minimum of of ¾ in., spaced a max 8 in. o.c.

NATIONAL GYPSUM CO – Type PBCI

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

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FIRE RATING FOR 2 HOUR FLOOR/CEILING ASSEMBLY
U.L. DESIGN NO. 301

FIRE RATING FOR 2 HOUR FLOOR/CEILING ASSEMBLY
U.L. DESIGN NO. 301

Design No. L512

March 26, 2026

Unrestrained Assembly Rating -- 1 Hr.

Finish Rating -- 21 Min. or (16 Min. See Item 5A)

This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be used -- See Guide BXUV or BXUV7

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

1. Flooring Systems -- The flooring system shall consist of one of the following:

System No. 1

Subflooring -- Min 1 by 6 in. T & G lumber fastened diagonally to joists, or min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.

Vapor Barrier -- Nom 0.010 in. thick commercial rosin-sized building paper.

Finish Flooring -- Min 1 by 3 in. T & G and end matched laid perpendicular to joists, or 19/32 in. plywood, min grade "Underlayment". Face grain of plywood to be perpendicular to joists with joints staggered.

System No. 2

Subflooring -- Min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.

Vapor Barrier -- (Optional) -- Nom 0.010 in. thick commercial asphalt saturated felt.

Finish Flooring - Floor Topping Mixture* -- Min 3/4 in. thickness of floor topping mixture having a minimum compressive strength of 1800 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

UNITED STATES GYPSUM CO -- Types LRK, HSLRK, CSD

USG MEXICO S A DE C V -- Types LRK, HSLRK, CSD

Floor Mat Materials* -- (Optional) -- Floor mat material loose laid over the subfloor. Refer to manufacturer's instructions regarding the minimum thickness of floor topping over each floor mat material.

UNITED STATES GYPSUM CO -- Types SAM, LEVELROCK® Brand Sound Reduction Board, LEVELROCK® Brand Floor Underlayment SRM-25

Alternate Floor Mat Materials* -- (Optional) -- Nom 3/8 in. thick floor mat material loose laid over the subfloor. Floor topping thickness shall be as specified under Floor Topping Mixture.

GRASSWORX L L C -- Type SC50

System No. 3

Subflooring -- Min 19/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.

Floor Mat Materials* -- (Optional) -- Floor mat material nom 1/8 in. (3 mm) thick loose laid over the subfloor. Floor topping thickness shall be a min of 3/4 in. (19 mm)

HACKER INDUSTRIES INC -- FIRM-FILL SCM 125

Alternate Floor Mat Materials -- (Optional) -- Floor mat material nom 1/4 in. (6 mm) thick loose laid over the subfloor. Floor topping thickness shall be a min of 1 in. (25 mm)

HACKER INDUSTRIES INC -- Types FIRM-FILL SCM 250 and FIRM-FILL SCM 250+

Alternate Floor Mat Materials -- (Optional) -- Floor mat material nom 3/8 in. (10 mm) thick loose laid over the subfloor. Floor topping thickness shall be a min of 1-1/4 in. (32 mm)

HACKER INDUSTRIES INC -- Types FIRM-FILL SCM 400 and FIRM-FILL SCM 400+

Alternate Floor Mat Materials -- (Optional) -- Floor mat material nom 3/4 in. (19 mm) thick loose laid over the subfloor. Floor topping thickness shall be a min of 1-1/2 in. (38 mm)

HACKER INDUSTRIES INC -- Types FIRM-FILL SCM 750 and FIRM-FILL SCM 750+

Alternate Floor Mat Materials -- (Optional) -- Floor mat material nom 5/64 in. (2 mm) thick adhered to subfloor with Hacker Floor Primer. Primer to be applied to the surface of the mat prior to the placement of a min 1 in. of floor-topping mixture.

HACKER INDUSTRIES INC -- Type Hacker Sound-Mat

Alternate Floor Mat Materials -- (Optional) -- Floor mat material nom 1/4 in. (6 mm) thick adhered to subfloor with Hacker Floor Primer. Primer to be applied to the surface of the mat prior to the placement of a min 1-1/4 in. (32 mm) of floor-topping mixture.

HACKER INDUSTRIES INC -- Type Hacker Sound-Mat II.

Metal Lath (Optional) -- For use with 3/8 in. (10 mm) floor mat materials, 3/8 in. expanded steel diamond mesh, 3.4 lbs/sq yd placed over the floor mat material. Hacker Floor Primer to be applied prior to the placement of the metal lath. When metal lath is used, floor topping thickness a nom 1-1/4 in. over the floor mat.

Finish Flooring -- Floor Topping Mixture* -- Min 3/4 in. thickness of floor topping mixture having a min compressive strength of 1100 psi. Mixture shall consist of 6.8 gal of water to 80 lbs of floor topping mixture to 1.9 cu ft of sand.

HACKER INDUSTRIES INC -- Firm-Fill Gypsum Concrete, Firm-Fill 2010, Firm-Fill 3310, Firm-Fill 4010, Firm-Fill High Strength, Gyp-Span Radiant

System No. 4

Subflooring -- Min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.

Vapor Barrier -- (Optional) -- Nom 0.030 in. thick commercial asphalt saturated felt.

Finish Flooring -- Floor Topping Mixture* -- Min 1-1/2 in. thickness of floor topping mixture having a min compressive strength of 1000 psi and a cast density of 100 plus or minus 5 pcf. Foam concentrate mixed 40:1 by volume with water and expanded at 100 psi through nozzle. Mixture shall consist of 1.4 cu feet of preformed foam concentrate to 94 lbs Type I Portland cement, 300 lbs of sand with 5-1/2 gal of water.

ELASTIZELL CORP OF AMERICA -- Type FF

System No. 5

Subflooring -- Min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.

Vapor Barrier-(Optional) -- Nom 0.030 in. thick commercial asphalt saturated felt.

Finish Flooring -- Floor Topping Mixture* -- Min 1-1/2 in. thickness of floor topping mixture having a min compressive strength of 1000 psi and a cast density of 100 plus or minus 5 pcf. Foam concentrate mixed 40:1 by volume with water and expanded at 100 psi through nozzle. Mixture shall consist of 1.2 cu feet of preformed foam concentrate to 94 lbs Type I Portland cement, 300 lbs of sand with 5-1/2 gal of water.

AERIX INDUSTRIES -- Floor Topping Mixture

System No. 6

Deleted.

System No. 7

Subflooring -- Min 19/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.

Vapor Barrier -- (Optional) -- Nom 0.030 in. thick commercial asphalt saturated felt.

Finish Flooring -- Floor Topping Mixture* -- Min 3/4 in. thickness of floor topping mixture having a min compressive strength of 1000 psi. Mixture shall consist of 5 to 8 gal of water to 80 lbs of floor topping mixture to 2.1 cu ft of sand.

ULTRA QUIET FLOORS -- UQF-A, UQF-Super Blend, UQF-Plus 2000

System No. 8

Subflooring -- Min 15/32 in. wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to joists with joints staggered.

Vapor Barrier -- (Optional) -- Nom 0.030 in thick commercial asphalt saturated felt.

Finish Flooring -- Floor Topping Mixture* -- Min 3/4 thickness of floor topping mixture having a minimum compressive strength of 1500 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

MAXXON CORP -- Type Maxxon Standard and Maxxon High Strength

Floor Mat Materials* -- (Optional) --Floor mat material loose laid over the subfloor. Refer to manufacturer's instructions regarding the minimum thickness of floor topping over each floor mat material.

MAXXON CORP -- Type Encapsulated Sound Mat.

Floor Mat Reinforcement -- (Optional) Refer to manufacturer's instructions regarding minimum thickness of floor topping for use with floor mat reinforcement.

Metal Lath (Optional) -- 3/8 in. expanded galvanized steel diamond mesh, 3.4 lbs/sq yd loose laid over the floor mat material.

System No. 9

Subflooring -- Min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.

Vapor Barrier -- (Optional) Nom 0.030 in. thick commercial asphalt saturated felt.

Finish Flooring -- Floor Topping Mixture* -- Min 3/4 in. thickness of floor topping mixture having a minimum compressive strength of 1500 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

FORMULATED MATERIALS LLC -- Types FR-25, FR-30, SiteMix, and Treadstone Advantage

UNITED STATES GYPSUM CO -- Levelrock SLC

Alternate Floor Mat Material* -- (Optional) Floor mat material nominal 2 - 9.5 mm thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.

FORMULATED MATERIALS LLC -- Types M1, M2, M3, Elite, Duo, R1, R2, and Treadstone Elite Max

System No. 10

Subflooring -- Min 1 by 6 in. T & G lumber fastened diagonally to joists, or min 15/32 in. thick plywood or min 7/16 in. thick oriented strand board (OSB) wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.

Finish Floor -- Mineral and Fiber Board* -- Min 1/2 in. thick, supplied in sizes ranging from 3 ft by 4 ft to 8 ft by 12 ft. All joints to be staggered a min of 12 in. with adjacent sub-floor joints.

HOMASOTE CO -- Type 440-32 Mineral and Fiber Board

System No. 11

Subflooring -- Min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.

Vapor Barrier -- (Optional) -- Nom 0.030 in. thick commercial asphalt saturated felt.

Finish Flooring -- Floor Topping Mixture* -- Min 3/4 or 1 in. thickness of floor topping mixture for 19/32 or 15/32 in. thick wood structural panels respectively, having a min compressive strength of 1000 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

ARCOSA SPECIALTY MATERIALS -- AccuCrete® Types NexGen, Green, Prime and PrePour, AccuRadiant®, AccuLevel® Types G40, G50 and SD30

UNITED STATES GYPSUM CO -- Levelrock SLC

Alternate Floor Mat Material* -- (Optional) - Floor mat material nominal 2 - 9.5 mm thick loose laid over the subfloor. Floor topping shall be a min of 3/4 in. or 1 in. thickness of floor topping mixture for 19/32 or 15/32 in. thick wood structural panels respectively.

ARCOSA SPECIALTY MATERIALS -- AccuQuiet® Types D13, D-18, D25, DX38, EM.125, EM.125S, EM.250, EM.250S, EM.375, EM.375S, EM.750, and EM.750S.

System No. 12

Subflooring -- 15/32 or 19/32 in. thick wood structural panels, min. grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to joists with joints staggered.

Vapor Barrier -- (Optional) -- Nom 0.030 in. thick commercial asphalt saturated felt.

Finish Flooring -- Floor Topping Mixture* -- Min 3/4 or 1 in. thickness of floor topping mixture for 19/32 or 15/32 in. thick wood structural panels respectively, having a min compressive strength of 2100 psi. Refer to manufacturer's instructions accompanying the material for specific mix design. Refer to the manufacturer's instructions accompanying the material and/or contact the manufacturer's technical support for specific mix design and minimum thickness recommended for use with eligible floor mat(s).

System No. 13

Subflooring -- Min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.

Vapor Barrier -- (Optional) - Commercial asphalt saturated felt, 0.030 in. thick.

Vapor Barrier -- (Optional) - Nom 0.010 in. thick commercial rosin-sized building paper.

Finish Flooring* -- Min 3/4 in. thickness of any Floor Topping Mixture bearing the UL Classification Marking as to Fire Resistance. See Floor- and Roof-Topping Mixtures (CCOX) category for names of Classified Companies.

Floor Mat Materials* -- (Optional) -- Nom. 1/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.

KEENE BUILDING PRODUCTS CO INC -- Type Quiet Qurl 55/025 and Quiet Qurl 55/025 N

Alternate Floor Mat Materials* -- (Optional) -- Floor mat material Nom. 3/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in.

KEENE BUILDING PRODUCTS CO INC -- Type Quiet Qurl 60/040 and Quiet Qurl 60/040 N

Alternate Floor Mat Materials* -- (Optional) -- Floor mat material Nom. 3/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1-1/2 in.

KEENE BUILDING PRODUCTS CO INC -- Type Quiet Qurl 65/075, Quiet Qurl 65/075 N

Alternate Floor Mat Materials* -- (Optional) -- Floor mat material Nom. 1/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.

KEENE BUILDING PRODUCTS CO INC -- Type Quiet Qurl 52/013 and Quiet Qurl 52/013 N

Alternate Floor Mat Materials* -- (Optional) -- Floor mat material Nom. 1/4 in. entangled net core with a compressible fabric attached to the bottom loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in.

KEENE BUILDING PRODUCTS CO INC -- Quiet Qurl 55/025 MT and Quiet Qurl 55/025 N MT

System No. 14

Subflooring -- Min 23/32 in. thick T&G wood structural panels, min grade "Underlayment" or "Single-Floor". Face grain of plywood or strength axis of panels to be perpendicular to the trusses with end joints staggered 4 ft. Panels secured to trusses with construction adhesive and No. 6d ringed shank nails spaced 12 in. OC along each truss. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.

Gypsum Board* -- One layer of nom 5/8 in. thick, 4 ft wide gypsum board, installed with long dimension perpendicular to joists. Gypsum board secured with 1 in. long No. 6 Type W bugle head steel screws spaced 12 in. OC and located a min of 1-1/2 in. from side and end joints. The joints of the gypsum board are to be staggered a minimum of 12 inches from the joints of the subfloor.

GEORGIA-PACIFIC GYPSUM L L C -- Type DS

Floor Mat Materials* -- (As an alternate to the single layer gypsum board) -- Floor mat material loose laid over the subfloor.

MAXXON CORP -- Type Encapsulated Sound Mat.

Gypsum Board* -- (For use when floor mat is used) Two layers of nom 5/8 in. thick, 4 ft wide gypsum board, installed with long dimension perpendicular to joists on top of the floor mat material. Gypsum board secured to each other with 1 in. long No. 6 Type G bugle head steel screws spaced 12 in. OC and located a min of 1-1/2 in. from side and end joints. The joints of the gypsum board are to be staggered a minimum of 12 inches in between layers and from the joints of the subfloor.

GEORGIA-PACIFIC GYPSUM L L C -- Type DS

System No. 15

Subflooring -- Min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.

Vapor Barrier -- (Optional) -- Nom 0.030 in. thick commercial asphalt saturated felt.

Finish Flooring -- Floor Topping Mixture* -- Min 3/4 or 1 in. thickness of floor topping mixture for 19/32 or 15/32 in. thick wood structural panels respectively, having a min compressive strength of 1000 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

DEPENDABLE LLC -- GSL M3.4, GSL K2.6, GSL-CSD and GSL RH

UNITED STATES GYPSUM CO -- Levelrock SLC

Floor Mat Materials* -- (Optional) -- Nom. 1/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.

KEENE BUILDING PRODUCTS CO INC -- Type Quiet Qurl 55/025 and Quiet Qurl 55/025 N

Alternate Floor Mat Materials* -- (Optional) -- Floor mat material Nom. 3/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in.

KEENE BUILDING PRODUCTS CO INC -- Type Quiet Qurl 60/040 and Quiet Qurl 60/040 N

Alternate Floor Mat Materials* -- (Optional) -- Floor mat material Nom. 3/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1-1/2 in.

KEENE BUILDING PRODUCTS CO INC -- Type Quiet Qurl 65/075, Quiet Qurl 65/075 N

Alternate Floor Mat Materials* -- (Optional) -- Floor mat material Nom. 1/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.

KEENE BUILDING PRODUCTS CO INC -- Type Quiet Qurl 52/013 and Quiet Qurl 52/013 N

Alternate Floor Mat Materials* -- (Optional) -- Floor mat material Nom. 1/4 in. entangled net core with a compressible fabric attached to the bottom loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in.

KEENE BUILDING PRODUCTS CO INC -- Quiet Qurl 55/025 MT and Quiet Qurl 55/025 N MT

System No. 16

Subflooring -- Min 1 by 6 in. T & G lumber fastened diagonally to joists, or min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.

Finish Flooring* -- Floor Topping Materials -- Min 3/4 in. to 1-1/2 in. thickness of any Floor Topping Mixture bearing the UL Classification Marking as to Fire Resistance with a minimum compressive strength of 1500 psi.

See Floor- and Roof-Topping Mixtures (CCOX) category for names of Classified Companies.

Floor Mat Materials* -- (Optional) -- Floor mat material nom 1/8 in. to 3/4 in. thick. Loose laid over the subfloor. When used, Acousti-flor CSM (crack suppression mat) is loose laid over the floor mat material. Floor topping material thickness is dependent on thickness of floor mat used.

WALFLOR INDUSTRIES INC -- Type Acousti-flor, Acousti-flor CSM. Floor topping thickness depends on products used as follows:

Acousti-flor (1/8 in. thick) - Floor topping thickness shall be a minimum of 3/4 in.

Acousti-flor (1/4 in. thick) - Floor topping thickness shall be a minimum of 1 in.

Acousti-flor (3/8 in. thick) - Floor topping thickness shall be a minimum of 1 in.

Acousti-flor (3/4 in. thick) - Floor topping thickness shall be a minimum of 1-1/2 in.

Metal Lath -- (Optional) -- Expanded steel diamond mesh, 2.5 lb / sq yd loose laid over floor mat material.

Fiberglass Mesh Reinforcement -- (Optional) -- Coated non-woven glass fiber mesh grid loose laid over floor mat material.

System No. 17

Subflooring -- Min 1 by 6 in. T & G lumber fastened diagonally to joists, or min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.

Finish Flooring - Floor Topping Mixture* -- Min 1 in. thickness of floor topping mixture having a min compressive strength of 4500 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

SIKA DEUTSCHLAND GMBH -- Type SCHONOX AP Rapid Plus

System No. 18

Subflooring -- Min 1 by 6 in. T & G lumber fastened diagonally to joists, or min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.

Vapor Barrier -- (Optional) - Commercial asphalt saturated felt, 0.030 in. thick.

Vapor Barrier -- (Optional) - Nom 0.010 in. thick commercial rosin-sized building paper.

Finish Flooring - Floor Topping Mixture* -- Min 3/4 in. thickness of any Floor Topping Mixture bearing the UL Classification Marking as to Fire Resistance. See Floor- and Roof-Topping Mixtures (CCOX) category for names of Classified Companies. Refer to the manufacturer's instructions accompanying the material and/or contact the manufacturer's technical support for specific mix design and minimum thickness recommended for use with eligible floor mat(s).

Floor Mat Materials* -- (Optional, Not Shown) - Floor mat material loose laid over the subfloor. Refer to manufacturer's instructions regarding the minimum thickness of floor topping over each floor mat material.

Freudenberg Performance Materials LP -- EnkaSonic® by Colbond a member of the Low & Bonar group Types 125, 250, 250 Plus, 400, 400 Plus, 750, and 750 Plus.

Floor Mat Reinforcement -- (Optional) - Refer to manufacturer's instructions regarding minimum thickness of floor topping for use with floor mat reinforcement.

Metal Lath -- (Optional) -- Expanded steel diamond mesh, 2.5 lb / sq yd loose laid over floor mat material.

Fiberglass Mesh Reinforcement -- (Optional) -- Coated non-woven glass fiber mesh grid loose laid over floor mat material.

System No. 19

Subflooring -- Min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.

Vapor Barrier -- (Optional) -- Nom 0.030 in. thick commercial asphalt saturated felt.

Floor Mat Materials* -- (Optional) -- Floor mat material loose laid over the subfloor. Refer to manufacturer's instructions regarding the minimum thickness of floor topping over each floor mat material.

GRASSWORX L L C -- SC Types

Finish Flooring* -- Min 3/4 in. thickness of any Floor Topping Mixture bearing the UL Classification Marking as to Fire Resistance. See Floor- and Roof-Topping Mixtures (CCOX) category for names of Classified Companies.

Floor Mat Reinforcement -- (Optional) - Refer to manufacturer's instructions regarding minimum thickness of floor topping for use with floor mat reinforcement.

Metal Lath -- (Optional) -- Expanded steel diamond mesh, 2.5 lb / sq yd loose laid over floor mat material.

Fiberglass Mesh Reinforcement -- (Optional) -- Coated non-woven glass fiber mesh grid loose laid over floor mat material.

System No. 20

Subflooring -- Min 1 by 6 in. T & G lumber fastened diagonally to joists, or min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.

Finish Flooring - Floor Topping Mixture* -- Min 3/4 in. thickness of floor topping mixture having a min compressive strength of 1000 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

ALPHAGYP, LLC -- Type AlphaGyp

Floor Mat Materials* -- (Optional) -- Nom. 1/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.

KEENE BUILDING PRODUCTS CO INC -- Type Quiet Qurl 55/025 and Quiet Qurl 55/025 N

Alternate Floor Mat Materials* -- (Optional) -- Floor mat material Nom. 3/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in.

KEENE BUILDING PRODUCTS CO INC -- Type Quiet Qurl 60/040 and Quiet Qurl 60/040 N

Alternate Floor Mat Materials* -- (Optional) -- Floor mat material Nom. 3/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1-1/2 in.

KEENE BUILDING PRODUCTS CO INC -- Type Quiet Qurl 65/075, Quiet Qurl 65/075 N

Alternate Floor Mat Materials* -- (Optional) -- Floor mat material Nom. 1/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.

KEENE BUILDING PRODUCTS CO INC -- Type Quiet Qurl 52/013 and Quiet Qurl 52/013 N

Alternate Floor Mat Materials* -- (Optional) -- Floor mat material Nom. 1/4 in. entangled net core with a compressible fabric attached to the bottom loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in.

KEENE BUILDING PRODUCTS CO INC -- Quiet Qurl 55/025 MT and Quiet Qurl 55/025 N MT

System No. 21

Subflooring -- Min 1 by 6 in. T & G lumber fastened diagonally to joists, or min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.

Floor Mat Materials* -- (Optional) -- Any Floor Mat Material bearing the UL Classification Marking as to Fire Resistance. See Floor Mat Materials (CCQU) category for names of Classified Companies. Floor mat material loose laid over the subfloor. Refer to manufacturer's instructions regarding the minimum thickness of floor topping over each floor mat material.

Metal Lath -- (Optional) -- 3.4 lbs/sq yd expanded galvanized steel diamond lath. Refer to manufacturer's instructions regarding installation recommendations.

Finish Flooring - Floor Topping Mixture* -- Min 3/4 in. thickness of floor topping mixture having a min compressive strength of 2500 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

LATICRETE INTERNATIONAL INC -- Type LAT

System No. 22

Subflooring -- Min 15/32 in. wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to joists with joints staggered.

Vapor Barrier -- (Optional) -- Nom 0.030 in thick commercial asphalt saturated felt.

Finish Flooring -- Floor Topping Mixture* -- Min 3/4 thickness of floor topping mixture having a minimum compressive strength of 1500 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

Floor Mat Materials* -- (Optional) --Floor mat material loose laid over ...
over each floor mat material.

System No. 23

2. Wood Joists -- Min 2 by 10, spaced 16 in. OC and effectively fi...

3. Cross Bridging -- Min 1 by 3 in. or min 2 by 10 solid blocking.

3A. Horizontal Bridging -- Used in lieu of Item 3 in same joist bay as ...
with nails.

provided with the damper. A steel grille (Item 7) shall be installed in a...

AIR KING VENTILATION PRODUCTS -- Series FRAS, Series FRAK...

CENTRAL VENTILATION SYSTEMS CO L L C -- Models C-S/R-HC...

JAMIL ALI NASSER AL-ZADJALI FOR INDUSTRY-- Models C-S/R-H...

METAL-FAB INC -- Models MSCDHC, MRCDHC

PRICE INDUSTRIES LTD -- Models CD-S/R-HC, CD-RD-HC

UNITED ENERTECH CORP -- Models C-S/R-HC(-A), C-RD-HC(-A)

5. Gypsum Board* -- Nom 1/2 or 5/8 in. thick, 4 ft wide gypsum b...
coated cooler nails, spaced 6 in. OC, for the 1/2 in. board and 5/8 in. ...

AMERICAN GYPSUM CO -- Types AG-C

CABOT MANUFACTURING ULC -- 1/2 in. Type C, 5/8 in. Type C.

CERTAINTEED GYPSUM INC -- Type C

GEORGIA-PACIFIC GYPSUM L L C -- Types 5, DAPC, TG-C

UNITED STATES GYPSUM CO -- Types C, IP-X2, IPC-AR

USG BORAL DRYWALL SFZ LLC -- Type C

located 1/2 in. and 3 in. from the board edges.

USG BORAL DRYWALL SFZ LLC -- Type C

5B. Gypsum Board* -- (As an alternative to Items 5 and 5A) Nom 5/8 ...
spacing 6 in. OC.

CERTAINTEED GYPSUM INC -- Type LWTX

6. Finishing System -- (Not Shown) -- Vinyl, dry or premixed joint ...
first layer of compound over all joints. As an alternate, nom 3/32 in. th...

7. Grille -- Steel grille, installed in accordance with the installation ...

8. Discrete Products Installed in Air-handling Spaces* -- Automati...
Model CFD7 damper (CABS). Ceiling damper to be provided with ple...
installed into any UL Class 0 or Class 1 flexible air duct in accordance...

METAL INDUSTRIES INC -- Model ABV-4, ABV-5, ABV-6

* Indicates such products shall bear the UL or cUL Certification ...

Last Updated on 2026-03-26

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CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

FIRE RESISTANCE
RATINGS

DATE: 06/26/2026
REVISED:

GEORGE J. KONTOGIANNIS REGISTERED
No. AR00034309
STATE OF INDIANA
ARCHITECT

GEORGE J. KONTOGIANNIS, LICENSE #AR00034309
EXPIRATION DATE 12/31/2027

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- [ ] SUBMISSION SET 06/27/2025
- [ ] ZONING SET 05/07/2026
- [x] BID SET 06/26/2026
- [ ] PERMIT SET
- [ ] CONSTRUCTION SET

FR-6

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Design No. L512

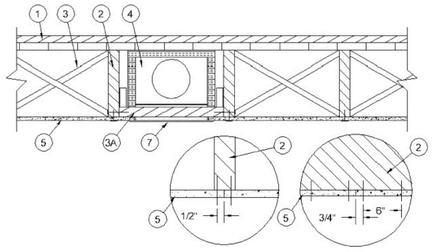
March 26, 2026

Unrestrained Assembly Rating -- 1 Hr.

Finish Rating -- 21 Min. or (16 Min. See Item 5A)

This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be used -- See Guide BXUV or BXUV7

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.




End Joint Detail  Side Joint Detail

1. Flooring Systems -- The flooring system shall consist of one of the following:

System No. 1

Subflooring -- Min 1 by 6 in. T & G lumber fastened diagonally to joists, or min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.

Vapor Barrier -- Nom 0.010 in. thick commercial rosin-sized building paper.

Finish Flooring -- Min 1 by 3 in. T & G and end matched laid perpendicular to joists, or 19/32 in. plywood, min grade "Underlayment". Face grain of plywood to be perpendicular to joists with joints staggered.

System No. 2

Subflooring -- Min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.

Vapor Barrier -- (Optional) -- Nom 0.010 in. thick commercial asphalt saturated felt.

Finish Flooring - Floor Topping Mixture* -- Min 3/4 in. thickness of floor topping mixture having a minimum compressive strength of 1800 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

UNITED STATES GYPSUM CO -- Types LRK, HSLRK, CSD

USG MEXICO S A DE C V -- Types LRK, HSLRK, CSD

Floor Mat Materials* -- (Optional) -- Floor mat material loose laid over the subfloor. Refer to manufacturer's instructions regarding the minimum thickness of floor topping over each floor mat material.

UNITED STATES GYPSUM CO -- Types SAM, LEVELROCK® Brand Sound Reduction Board, LEVELROCK® Brand Floor Underlayment SRM-25

Alternate Floor Mat Materials* -- (Optional) -- Nom 3/8 in. thick floor mat material loose laid over the subfloor. Floor topping thickness shall be as specified under Floor Topping Mixture.

GRASSWORX L L C -- Type SC50

System No. 3

Subflooring -- Min 19/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.

Floor Mat Materials* -- (Optional) -- Floor mat material nom 1/8 in. (3 mm) thick loose laid over the subfloor. Floor topping thickness shall be a min of 3/4 in. (19 mm)

HACKER INDUSTRIES INC -- FIRM-FILL SCM 125

Alternate Floor Mat Materials -- (Optional) -- Floor mat material nom 1/4 in. (6 mm) thick loose laid over the subfloor. Floor topping thickness shall be a min of 1 in. (25 mm)

HACKER INDUSTRIES INC -- Types FIRM-FILL SCM 250 and FIRM-FILL SCM 250+

Alternate Floor Mat Materials -- (Optional) -- Floor mat material nom 3/8 in. (10 mm) thick loose laid over the subfloor. Floor topping thickness shall be a min of 1-1/4 in. (32 mm)

HACKER INDUSTRIES INC -- Types FIRM-FILL SCM 400 and FIRM-FILL SCM 400+

Alternate Floor Mat Materials -- (Optional) -- Floor mat material nom 3/4 in. (19 mm) thick loose laid over the subfloor. Floor topping thickness shall be a min of 1-1/2 in. (38 mm)

HACKER INDUSTRIES INC -- Types FIRM-FILL SCM 750 and FIRM-FILL SCM 750+

Alternate Floor Mat Materials -- (Optional) -- Floor mat material nom 5/64 in. (2 mm) thick adhered to subfloor with Hacker Floor Primer. Primer to be applied to the surface of the mat prior to the placement of a min 1 in. of floor-topping mixture.

HACKER INDUSTRIES INC -- Type Hacker Sound-Mat

Alternate Floor Mat Materials -- (Optional) -- Floor mat material nom 1/4 in. (6 mm) thick adhered to subfloor with Hacker Floor Primer. Primer to be applied to the surface of the mat prior to the placement of a min 1-1/4 in. (32 mm) of floor-topping mixture.

HACKER INDUSTRIES INC -- Type Hacker Sound-Mat II.

Metal Lath (Optional) -- For use with 3/8 in. (10 mm) floor mat materials, 3/8 in. expanded steel diamond mesh, 3.4 lbs/sq yd placed over the floor mat material. Hacker Floor Primer to be applied prior to the placement of the metal lath. When metal lath is used, floor topping thickness a nom 1-1/4 in. over the floor mat.

Finish Flooring -- Floor Topping Mixture* -- Min 3/4 in. thickness of floor topping mixture having a min compressive strength of 1100 psi. Mixture shall consist of 6.8 gal of water to 80 lbs of floor topping mixture to 1.9 cu ft of sand.

HACKER INDUSTRIES INC -- Firm-Fill Gypsum Concrete, Firm-Fill 2010, Firm-Fill 3310, Firm-Fill 4010, Firm-Fill High Strength, Gyp-Span Radiant

System No. 4

Subflooring -- Min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.

Vapor Barrier -- (Optional) -- Nom 0.030 in. thick commercial asphalt saturated felt.

Finish Flooring -- Floor Topping Mixture* -- Min 1-1/2 in. thickness of floor topping mixture having a min compressive strength of 1000 psi and a cast density of 100 plus or minus 5 pcf. Foam concentrate mixed 40:1 by volume with water and expanded at 100 psi through nozzle. Mixture shall consist of 1.4 cu feet of preformed foam concentrate to 94 lbs Type I Portland cement, 300 lbs of sand with 5-1/2 gal of water.

ELASTIZELL CORP OF AMERICA -- Type FF

System No. 5

Subflooring -- Min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.

Vapor Barrier-(Optional) -- Nom 0.030 in. thick commercial asphalt saturated felt.

Finish Flooring -- Floor Topping Mixture* -- Min 1-1/2 in. thickness of floor topping mixture having a min compressive strength of 1000 psi and a cast density of 100 plus or minus 5 pcf. Foam concentrate mixed 40:1 by volume with water and expanded at 100 psi through nozzle. Mixture shall consist of 1.2 cu feet of preformed foam concentrate to 94 lbs Type I Portland cement, 300 lbs of sand with 5-1/2 gal of water.

AERIX INDUSTRIES -- Floor Topping Mixture

System No. 6

Deleted.

System No. 7

Subflooring -- Min 19/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.

Vapor Barrier -- (Optional) -- Nom 0.030 in. thick commercial asphalt saturated felt.

Finish Flooring -- Floor Topping Mixture* -- Min 3/4 in. thickness of floor topping mixture having a min compressive strength of 1000 psi. Mixture shall consist of 5 to 8 gal of water to 80 lbs of floor topping mixture to 2.1 cu ft of sand.

ULTRA QUIET FLOORS -- UQF-A, UQF-Super Blend, UQF-Plus 2000

System No. 8

Subflooring -- Min 15/32 in. wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to joists with joints staggered.

Vapor Barrier -- (Optional) -- Nom 0.030 in thick commercial asphalt saturated felt.

Finish Flooring -- Floor Topping Mixture* -- Min 3/4 thickness of floor topping mixture having a minimum compressive strength of 1500 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

MAXXON CORP -- Type Maxxon Standard and Maxxon High Strength

Floor Mat Materials* -- (Optional) --Floor mat material loose laid over the subfloor. Refer to manufacturer's instructions regarding the minimum thickness of floor topping over each floor mat material.

MAXXON CORP -- Type Encapsulated Sound Mat.

Floor Mat Reinforcement -- (Optional) Refer to manufacturer's instructions regarding minimum thickness of floor topping for use with floor mat reinforcement.

Metal Lath (Optional) -- 3/8 in. expanded galvanized steel diamond mesh, 3.4 lbs/sq yd loose laid over the floor mat material.

System No. 9

Subflooring -- Min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.

Vapor Barrier -- (Optional) Nom 0.030 in. thick commercial asphalt saturated felt.

Finish Flooring -- Floor Topping Mixture* -- Min 3/4 in. thickness of floor topping mixture having a minimum compressive strength of 1500 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

FORMULATED MATERIALS LLC -- Types FR-25, FR-30, SiteMix, and Treadstone Advantage

UNITED STATES GYPSUM CO -- Levelrock SLC

Alternate Floor Mat Material* -- (Optional) Floor mat material nominal 2 - 9.5 mm thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.

FORMULATED MATERIALS LLC -- Types M1, M2, M3, Elite, Duo, R1, R2, and Treadstone Elite Max

System No. 10

Subflooring -- Min 1 by 6 in. T & G lumber fastened diagonally to joists, or min 15/32 in. thick plywood or min 7/16 in. thick oriented strand board (OSB) wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.

Finish Floor -- Mineral and Fiber Board* -- Min 1/2 in. thick, supplied in sizes ranging from 3 ft by 4 ft to 8 ft by 12 ft. All joints to be staggered a min of 12 in. with adjacent sub-floor joints.

HOMASOTE CO -- Type 440-32 Mineral and Fiber Board

System No. 11

Subflooring -- Min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.

Vapor Barrier -- (Optional) -- Nom 0.030 in. thick commercial asphalt saturated felt.

Finish Flooring -- Floor Topping Mixture* -- Min 3/4 or 1 in. thickness of floor topping mixture for 19/32 or 15/32 in. thick wood structural panels respectively, having a min compressive strength of 1000 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

ARCOSA SPECIALTY MATERIALS -- AccuCrete® Types NexGen, Green, Prime and PrePour, AccuRadiant®, AccuLevel® Types G40, G50 and SD30

UNITED STATES GYPSUM CO -- Levelrock SLC

Alternate Floor Mat Material* -- (Optional) - Floor mat material nominal 2 - 9.5 mm thick loose laid over the subfloor. Floor topping shall be a min of 3/4 in. or 1 in. thickness of floor topping mixture for 19/32 or 15/32 in. thick wood structural panels respectively.

ARCOSA SPECIALTY MATERIALS -- AccuQuiet® Types D13, D-18, D25, DX38, EM.125, EM.125S, EM.250, EM.250S, EM.375, EM.375S, EM.750, and EM.750S.

System No. 12

Subflooring -- 15/32 or 19/32 in. thick wood structural panels, min. grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to joists with joints staggered.

Vapor Barrier -- (Optional) -- Nom 0.030 in. thick commercial asphalt saturated felt.

Finish Flooring -- Floor Topping Mixture* -- Min 3/4 or 1 in. thickness of floor topping mixture for 19/32 or 15/32 in. thick wood structural panels respectively, having a min compressive strength of 2100 psi. Refer to manufacturer's instructions accompanying the material for specific mix design. Refer to the manufacturer's instructions accompanying the material and/or contact the manufacturer's technical support for specific mix design and minimum thickness recommended for use with eligible floor mat(s).

System No. 13

Subflooring -- Min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.

Vapor Barrier -- (Optional) - Commercial asphalt saturated felt, 0.030 in. thick.

Vapor Barrier -- (Optional) - Nom 0.010 in. thick commercial rosin-sized building paper.

Finish Flooring* -- Min 3/4 in. thickness of any Floor Topping Mixture bearing the UL Classification Marking as to Fire Resistance. See Floor- and Roof-Topping Mixtures (CCOX) category for names of Classified Companies.

Floor Mat Materials* -- (Optional) -- Nom. 1/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.

KEENE BUILDING PRODUCTS CO INC -- Type Quiet Qurl 55/025 and Quiet Qurl 55/025 N

Alternate Floor Mat Materials* -- (Optional) -- Floor mat material Nom. 3/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in.

KEENE BUILDING PRODUCTS CO INC -- Type Quiet Qurl 60/040 and Quiet Qurl 60/040 N

Alternate Floor Mat Materials* -- (Optional) -- Floor mat material Nom. 3/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1-1/2 in.

KEENE BUILDING PRODUCTS CO INC -- Type Quiet Qurl 65/075, Quiet Qurl 65/075 N

Alternate Floor Mat Materials* -- (Optional) -- Floor mat material Nom. 1/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.

KEENE BUILDING PRODUCTS CO INC -- Type Quiet Qurl 52/013 and Quiet Qurl 52/013 N

Alternate Floor Mat Materials* -- (Optional) -- Floor mat material Nom. 1/4 in. entangled net core with a compressible fabric attached to the bottom loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in.

KEENE BUILDING PRODUCTS CO INC -- Quiet Qurl 55/025 MT and Quiet Qurl 55/025 N MT

System No. 14

Subflooring -- Min 23/32 in. thick T&G wood structural panels, min grade "Underlayment" or "Single-Floor". Face grain of plywood or strength axis of panels to be perpendicular to the trusses with end joints staggered 4 ft. Panels secured to trusses with construction adhesive and No. 6d ringed shank nails spaced 12 in. OC along each truss. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.

Gypsum Board* -- One layer of nom 5/8 in. thick, 4 ft wide gypsum board, installed with long dimension perpendicular to joists. Gypsum board secured with 1 in. long No. 6 Type W bugle head steel screws spaced 12 in. OC and located a min of 1-1/2 in. from side and end joints. The joints of the gypsum board are to be staggered a minimum of 12 inches from the joints of the subfloor.

GEORGIA-PACIFIC GYPSUM L L C -- Type DS

Floor Mat Materials* -- (As an alternate to the single layer gypsum board) -- Floor mat material loose laid over the subfloor.

MAXXON CORP -- Type Encapsulated Sound Mat.

Gypsum Board* -- (For use when floor mat is used) Two layers of nom 5/8 in. thick, 4 ft wide gypsum board, installed with long dimension perpendicular to joists on top of the floor mat material. Gypsum board secured to each other with 1 in. long No. 6 Type G bugle head steel screws spaced 12 in. OC and located a min of 1-1/2 in. from side and end joints. The joints of the gypsum board are to be staggered a minimum of 12 inches in between layers and from the joints of the subfloor.

GEORGIA-PACIFIC GYPSUM L L C -- Type DS

System No. 15

Subflooring -- Min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.

Vapor Barrier -- (Optional) -- Nom 0.030 in. thick commercial asphalt saturated felt.

Finish Flooring -- Floor Topping Mixture* -- Min 3/4 or 1 in. thickness of floor topping mixture for 19/32 or 15/32 in. thick wood structural panels respectively, having a min compressive strength of 1000 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

DEPENDABLE LLC -- GSL M3.4, GSL K2.6, GSL-CSD and GSL RH

UNITED STATES GYPSUM CO -- Levelrock SLC

Floor Mat Materials* -- (Optional) -- Nom. 1/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.

KEENE BUILDING PRODUCTS CO INC -- Type Quiet Qurl 55/025 and Quiet Qurl 55/025 N

Alternate Floor Mat Materials* -- (Optional) -- Floor mat material Nom. 3/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in.

KEENE BUILDING PRODUCTS CO INC -- Type Quiet Qurl 60/040 and Quiet Qurl 60/040 N

Alternate Floor Mat Materials* -- (Optional) -- Floor mat material Nom. 3/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1-1/2 in.

KEENE BUILDING PRODUCTS CO INC -- Type Quiet Qurl 65/075, Quiet Qurl 65/075 N

Alternate Floor Mat Materials* -- (Optional) -- Floor mat material Nom. 1/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.

KEENE BUILDING PRODUCTS CO INC -- Type Quiet Qurl 52/013 and Quiet Qurl 52/013 N

Alternate Floor Mat Materials* -- (Optional) -- Floor mat material Nom. 1/4 in. entangled net core with a compressible fabric attached to the bottom loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in.

KEENE BUILDING PRODUCTS CO INC -- Quiet Qurl 55/025 MT and Quiet Qurl 55/025 N MT

System No. 16

Subflooring -- Min 1 by 6 in. T & G lumber fastened diagonally to joists, or min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.

Finish Flooring* -- Floor Topping Materials -- Min 3/4 in. to 1-1/2 in. thickness of any Floor Topping Mixture bearing the UL Classification Marking as to Fire Resistance with a minimum compressive strength of 1500 psi.

See Floor- and Roof-Topping Mixtures (CCOX) category for names of Classified Companies.

Floor Mat Materials* -- (Optional) -- Floor mat material nom 1/8 in. to 3/4 in. thick. Loose laid over the subfloor. When used, Acousti-flor CSM (crack suppression mat) is loose laid over the floor mat material. Floor topping material thickness is dependent on thickness of floor mat used.

WALFLOR INDUSTRIES INC -- Type Acousti-flor, Acousti-flor CSM. Floor topping thickness depends on products used as follows:

Acousti-flor (1/8 in. thick) - Floor topping thickness shall be a minimum of 3/4 in.

Acousti-flor (1/4 in. thick) - Floor topping thickness shall be a minimum of 1 in.

Acousti-flor (3/8 in. thick) - Floor topping thickness shall be a minimum of 1 in.

Acousti-flor (3/4 in. thick) - Floor topping thickness shall be a minimum of 1-1/2 in.

Metal Lath -- (Optional) -- Expanded steel diamond mesh, 2.5 lb / sq yd loose laid over floor mat material.

Fiberglass Mesh Reinforcement -- (Optional) -- Coated non-woven glass fiber mesh grid loose laid over floor mat material.

System No. 17

Subflooring -- Min 1 by 6 in. T & G lumber fastened diagonally to joists, or min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.

Finish Flooring - Floor Topping Mixture* -- Min 1 in. thickness of floor topping mixture having a min compressive strength of 4500 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

SIKA DEUTSCHLAND GMBH -- Type SCHONOX AP Rapid Plus

System No. 18

Subflooring -- Min 1 by 6 in. T & G lumber fastened diagonally to joists, or min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.

Vapor Barrier -- (Optional) - Commercial asphalt saturated felt, 0.030 in. thick.

Vapor Barrier -- (Optional) - Nom 0.010 in. thick commercial rosin-sized building paper.

Finish Flooring - Floor Topping Mixture* -- Min 3/4 in. thickness of any Floor Topping Mixture bearing the UL Classification Marking as to Fire Resistance. See Floor- and Roof-Topping Mixtures (CCOX) category for names of Classified Companies. Refer to the manufacturer's instructions accompanying the material and/or contact the manufacturer's technical support for specific mix design and minimum thickness recommended for use with eligible floor mat(s).

Floor Mat Materials* -- (Optional, Not Shown) - Floor mat material loose laid over the subfloor. Refer to manufacturer's instructions regarding the minimum thickness of floor topping over each floor mat material.

Freudenberg Performance Materials LP -- EnkaSonic® by Colbond a member of the Low & Bonar group Types 125, 250, 250 Plus, 400, 400 Plus, 750, and 750 Plus.

Floor Mat Reinforcement -- (Optional) - Refer to manufacturer's instructions regarding minimum thickness of floor topping for use with floor mat reinforcement.

Metal Lath -- (Optional) -- Expanded steel diamond mesh, 2.5 lb / sq yd loose laid over floor mat material.

Fiberglass Mesh Reinforcement -- (Optional) -- Coated non-woven glass fiber mesh grid loose laid over floor mat material.

System No. 19

Subflooring -- Min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.

Vapor Barrier -- (Optional) -- Nom 0.030 in. thick commercial asphalt saturated felt.

Floor Mat Materials* -- (Optional) -- Floor mat material loose laid over the subfloor. Refer to manufacturer's instructions regarding the minimum thickness of floor topping over each floor mat material.

GRASSWORX L L C -- SC Types

Finish Flooring* -- Min 3/4 in. thickness of any Floor Topping Mixture bearing the UL Classification Marking as to Fire Resistance. See Floor- and Roof-Topping Mixtures (CCOX) category for names of Classified Companies.

Floor Mat Reinforcement -- (Optional) - Refer to manufacturer's instructions regarding minimum thickness of floor topping for use with floor mat reinforcement.

Metal Lath -- (Optional) -- Expanded steel diamond mesh, 2.5 lb / sq yd loose laid over floor mat material.

Fiberglass Mesh Reinforcement -- (Optional) -- Coated non-woven glass fiber mesh grid loose laid over floor mat material.

System No. 20

Subflooring -- Min 1 by 6 in. T & G lumber fastened diagonally to joists, or min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.

Finish Flooring - Floor Topping Mixture* -- Min 3/4 in. thickness of floor topping mixture having a min compressive strength of 1000 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

ALPHAGYP, LLC -- Type AlphaGyp

Floor Mat Materials* -- (Optional) -- Nom. 1/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.

KEENE BUILDING PRODUCTS CO INC -- Type Quiet Qurl 55/025 and Quiet Qurl 55/025 N

Alternate Floor Mat Materials* -- (Optional) -- Floor mat material Nom. 3/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in.

KEENE BUILDING PRODUCTS CO INC -- Type Quiet Qurl 60/040 and Quiet Qurl 60/040 N

Alternate Floor Mat Materials* -- (Optional) -- Floor mat material Nom. 3/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1-1/2 in.

KEENE BUILDING PRODUCTS CO INC -- Type Quiet Qurl 65/075, Quiet Qurl 65/075 N

Alternate Floor Mat Materials* -- (Optional) -- Floor mat material Nom. 1/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.

KEENE BUILDING PRODUCTS CO INC -- Type Quiet Qurl 52/013 and Quiet Qurl 52/013 N

Alternate Floor Mat Materials* -- (Optional) -- Floor mat material Nom. 1/4 in. entangled net core with a compressible fabric attached to the bottom loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in.

KEENE BUILDING PRODUCTS CO INC -- Quiet Qurl 55/025 MT and Quiet Qurl 55/025 N MT

System No. 21

Subflooring -- Min 1 by 6 in. T & G lumber fastened diagonally to joists, or min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.

Floor Mat Materials* -- (Optional) -- Any Floor Mat Material bearing the UL Classification Marking as to Fire Resistance. See Floor Mat Materials (CCQU) category for names of Classified Companies. Floor mat material loose laid over the subfloor. Refer to manufacturer's instructions regarding the minimum thickness of floor topping over each floor mat material.

Metal Lath -- (Optional) -- 3.4 lbs/sq yd expanded galvanized steel diamond lath. Refer to manufacturer's instructions regarding installation recommendations.

Finish Flooring - Floor Topping Mixture* -- Min 3/4 in. thickness of floor topping mixture having a min compressive strength of 2500 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

LATICRETE INTERNATIONAL INC -- Type LAT

System No. 22

Subflooring -- Min 15/32 in. wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to joists with joints staggered.

Vapor Barrier -- (Optional) -- Nom 0.030 in thick commercial asphalt saturated felt.

Finish Flooring -- Floor Topping Mixture* -- Min 3/4 thickness of floor topping mixture having a minimum compressive strength of 1500 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

BoldStep -- Types BoldStep Regular and BoldStep High Strength

Floor Mat Materials* -- (Optional) --Floor mat material loose laid over the subfloor. Refer to manufacturer's instructions regarding the minimum thickness of floor topping over each floor mat material.

BoldStep -- Type Sound Mat

Floor Mat Reinforcement -- (Optional) Refer to manufacturer's instructions regarding minimum thickness of floor topping for use with floor mat reinforcement.

Metal Lath (Optional) -- 3/8 in. expanded galvanized steel diamond mesh, 3.4 lbs/sq yd loose laid over the floor mat material.

System No. 23

Subflooring -- Min 1 by 6 in. T & G lumber fastened diagonally to joists, or min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.

Vapor Barrier - (Optional) -- Nom 0.010 in. thick commercial rosin-sized building paper.

Finish Flooring - Floor Topping Mixture* -- Min 1 in. thickness of floor topping mixture having a min compressive strength of 2500 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

Apex Minerals LLC -- Type Apex Multi Underlayment

2. Wood Joists -- Min 2 by 10, spaced 16 in. OC and effectively fireblocked in accordance with local codes.

3. Cross Bridging -- Min 1 by 3 in. or min 2 by 10 solid blocking.

3A. Horizontal Bridging -- Used in lieu of Item 3 in same joist bay as ceiling damper (Item 4), when ceiling damper is employed. Wood 2 by 4 in. secured between joists with nails.

4. Ceiling Damper* -- (Optional) -- Max nom area shall be 198 sq in. Max rectangular size shall be 12 in. wide by 16-1/2 in. long. Max height of damper shall be 8-3/4 in. Aggregate damper openings shall not exceed 99 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturers installation instructions provided with the damper. A steel grille (Item 7) shall be installed in accordance with installation instructions.

AIR BALANCE INC -- Type 299 (See Item 5A)

AIR KING VENTILATION PRODUCTS -- Series FRAS, Series FRAK, Series FRAKV

CENTRAL VENTILATION SYSTEMS CO L L C -- Models C-S/R-HC(-A), C-RD-HC(-A)

JAMIL ALI NASSER AL-ZADJALI FOR INDUSTRY-- Models C-S/R-HC(-A), C-RD-HC(-A)

BADR & ASFOUR COMPANY FOR ENGINEERING AND METAL INDUSTRIES -- Models C-S/R-HC(-A), C-RD-HC(-A)

GREENHECK FAN CORP -- Model CRD-1WJ

METAL-FAB INC -- Models MSCDHC, MRCDHC

BRISK MFG INC -- Model BMI-50-CRD-S/R-WT

PRICE INDUSTRIES LTD -- Models CD-S/R-HC, CD-RD-HC

RUSKIN COMPANY -- Model CFD7

UNITED ENERTECH CORP -- Models C-S/R-HC(-A), C-RD-HC(-A)

5. Gypsum Board* -- Nom 1/2 or 5/8 in. thick, 4 ft wide gypsum board, installed with long dimension perpendicular to joists and secured with 5d and 6d cement coated cooler nails, spaced 6 in. OC, for the 1/2 in. board and 5/8 in. thick board, respectively. Nails spaced 3/4 and 1/2 in. from side and end joints, respectively.

AMERICAN GYPSUM CO -- Types AG-C

CABOT MANUFACTURING ULC -- 1/2 in. Type C, 5/8 in. Type C.

CERTAINTEED GYPSUM INC -- Type C

CGC INC -- Types C, IP-X2, IPC-AR

GEORGIA-PACIFIC GYPSUM L L C -- Types 5, DAPC, TG-C

NATIONAL GYPSUM CO -- Types eXP-C, FSK-C, FSW-C, FSLX

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM -- Type C or PG-C

PANEL REY S A -- Types PRC, PRC2, 5/8 in. Type PRX2

THAI GYPSUM PRODUCTS PCL -- Type C

UNITED STATES GYPSUM CO -- Types C, IP-X2, IPC-AR

USG BORAL DRYWALL SFZ LLC -- Type C

USG MEXICO S A DE C V -- Types C, IP-X2, IPC-AR

5A. Gypsum Board* -- (Finish Rating - 16 min.) Required when Air Balance Inc. Type 299 ceiling damper (Item 4) is installed. Nom 5/8 in. thick, 48 in. wide gypsum board, installed with long dimension perpendicular to joists. Gypsum board secured with 1-7/8 in. long, 6d cement coated nails spaced 6 in. OC with the first nails located 1/2 in. and 3 in. from the board edges.

UNITED STATES GYPSUM CO -- Type C

USG BORAL DRYWALL SFZ LLC -- Type C

USG MEXICO S A DE C V -- Type C

5B. Gypsum Board* -- (As an alternative to Items 5 and 5A) Nom 5/8 in. thick, 48 in. wide gypsum board installed, as described in Items 5 and 5A, with max screw spacing 6 in. OC.

CGC INC -- Type ULIX

UNITED STATES GYPSUM CO -- ULIX

5C. Gypsum Board* (As an alternative to Items 5, 5A, and 5B) -- Nom 5/8 in. thick, 4 ft. wide gypsum board, installed with long dimension perpendicular to joists. Gypsum board secured with 1-7/8 in. long screws spaced 6 in. OC.

CERTAINTEED GYPSUM INC -- Type LWTX

6. Finishing System -- (Not Shown) -- Vinyl, dry or premixed joint compound, applied in two coats to joints and screw-heads. Nom 2 in. wide paper tape embedded in first layer of compound over all joints. As an alternate, nom 3/32 in. thick veneer plaster may be applied to the entire surface of gypsum board.

7. Grille -- Steel grille, installed in accordance with the installation instructions provided with the ceiling damper.

8. Discrete Products Installed in Air-handling Spaces* -- Automatic Balancing Valve/Damper -- (Not Shown - Optional) -- For use with item 4, Ruskin Company's Model CFD7 damper (CABS). Ceiling damper to be provided with plenum box per damper manufacturer's instructions with side outlet only. Entire assembly to be installed into any UL Class 0 or Class 1 flexible air duct in accordance with the instructions provided by the automatic balancing valve/damper manufacturer.

METAL INDUSTRIES INC -- Model ABV-4, ABV-5, ABV-6

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

Last Updated on 2026-03-26

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FIRE RATING FOR 1 HOUR FLOOR/CEILING ASSEMBLY
U.L. DESIGN NO. L512

FIRE RATING FOR 1 HOUR FLOOR/CEILING ASSEMBLY
U.L. DESIGN NO. L512

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PROJECT:

# TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

## FIRE RESISTANCE RATINGS

DATE: 06/26/2026
REVISED:

GEORGE J. KONTOGIANNIS
REGISTERED
No. AR00034309
STATE OF INDIANA
ARCHITECT

GEORGE J. KONTOGIANNIS, LICENSE #AR00034309
EXPIRATION DATE 12/31/2027

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FR-7

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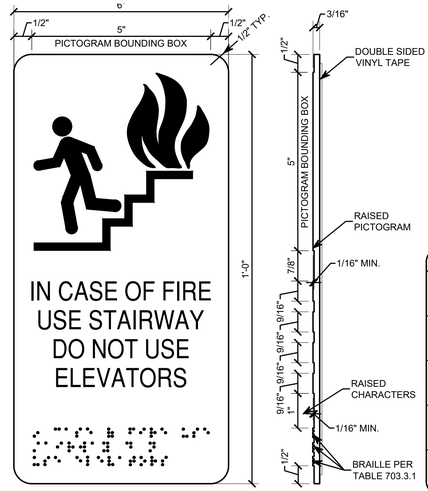
SEE LEED ENVIRONMENTAL TOBACCO SMOKE SECTION INDICATING TO PROVIDE SIGNAGE TO :

A. PROHIBIT SMOKING IN COMMON AREAS,
B. PROHIBIT SMOKING WITHIN 25' FEET OF BUILDING ENTRANCE
C. PROHIBIT SMOKING ON ENTIRE PROPERTY




## TYPICAL ELEVATOR SIGN

SCALE: N.T.S.

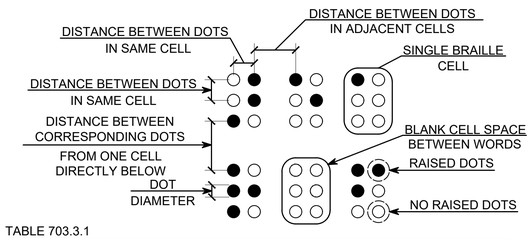
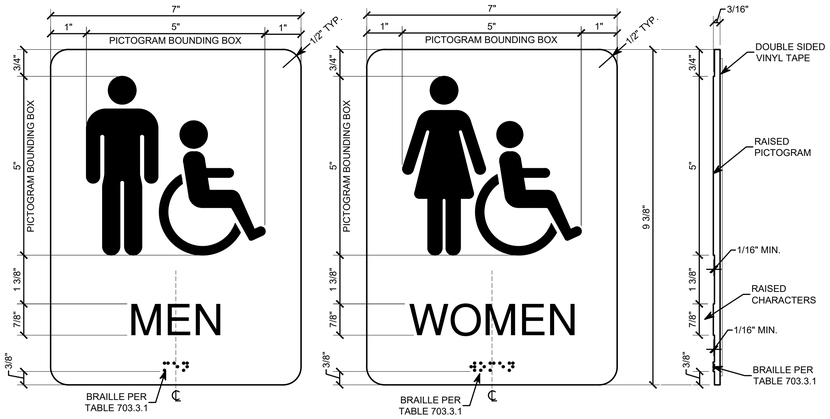



TABLE 703.3.1

| MEASUREMENT RANGE | MIN IN INCHES | MAX IN INCHES |
|---|---|---|
| DOT BASE DIAMETER | 0.059" | 0.063" |
| DISTANCE BETWEEN TWO DOTS IN THE SAME CELL[1] | 0.090" | 0.100" |
| DISTANCE BETWEEN CORRESPONDING DOTS IN ADJACENT CELLS[1] | 0.241" | 0.300" |
| DOT HEIGHT | 0.025" | 0.037" |
| DISTANCE BETWEEN CORRESPONDING DOTS FROM ONE CELL DIRECTLY BELOW [1] | 0.395" | 0.400" |

1. MEASURED FROM CENTER OF DOT



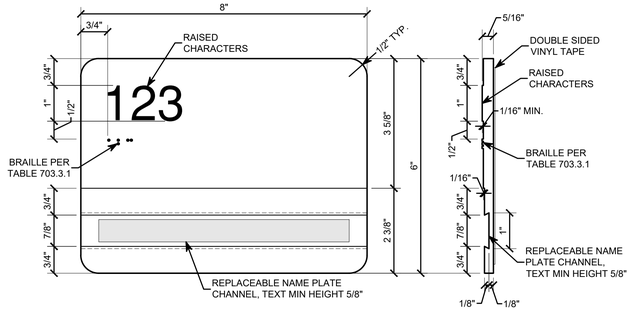

## TYPICAL SIGN W/ PICTOGRAM, CHARACTERS, & BRAILLE

SCALE: N.T.S.

LOCATIONS THAT NEED SIGNAGE WITH PICTOGRAMS AND/OR THE USE OF INTERNATIONAL SYMBOLS ARE AS FOLLOWS: ENTRANCES, DIRECTION TO ACCESSIBLE ENTRANCE, EXIT PASSAGEWAYS, EXIT STAIRWAYS, EXIT DISCHARGE LOCATION, ELEVATORS, TOILET & BATHING ROOMS, ROOMS WITH TTYs AND ASSISTED LISTENING SYSTEMS.

NOTE: ALL BUILDINGS WITH MORE THAN THREE (3) STORIES ARE REQUIRED TO HAVE FLOOR LEVEL SIGNS IN STAIRWELLS

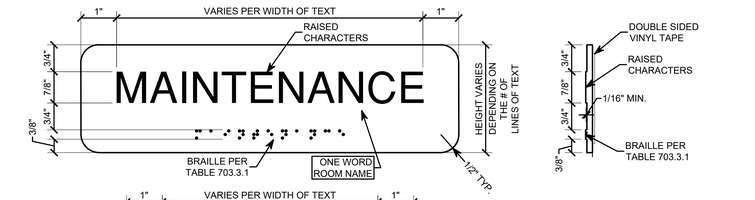
ALL PICTOGRAM SYMBOLS ARE TO FIT IN AN INVISIBLE BOX OF 5" x 5" WITH THE DIMENSION OF SEPARATION BETWEEN OTHER SIGN ELEMENTS AS SHOWN ABOVE. ALL SIGNAGE IS TO HAVE A CONTRASTING BACKGROUND COLOR, I.E. LIGHT SIGN ELEMENTS WITH A DARK BACKGROUND OR DARK SIGN ELEMENTS WITH A LIGHT BACKGROUND. ALL TEXT IS TO BE SANS SERIF FONT (HELVETICA OR ARIAL), WITH THE PROPORTIONS DESCRIBED IN SECTION 703.2.3. OF ADA, NO ITALIC, OBLIQUE, SCRIPT, HIGHLY DECORATIVE, OR UNUSUAL FONT FORMS.




## TYPICAL RESIDENT ROOM SIGN

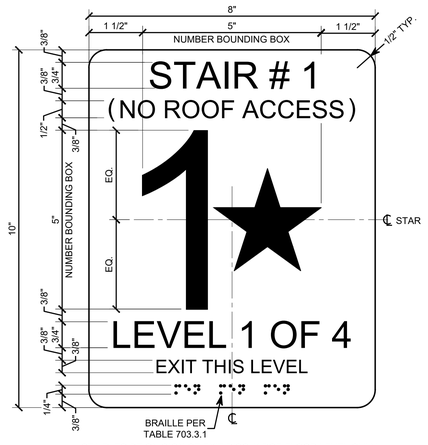
SCALE: N.T.S.

SEE SIGN LOCATION DETAIL ON SHEET AC-1 FOR MOUNTING HEIGHT AND POSITION

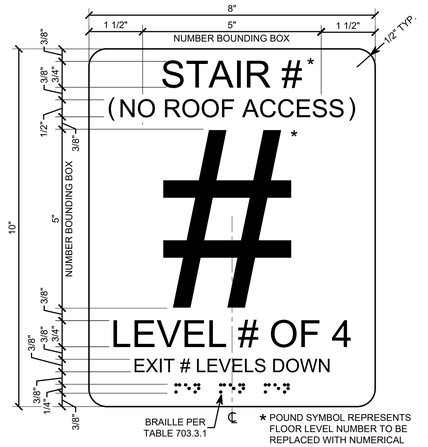



## TYPICAL ROOM ID SIGNS

SCALE: N.T.S.




STAIR TO BE ON SIGN OF EXIT DISCHARGE FLOOR LEVEL ONLY




★ POUND SYMBOL REPRESENTS FLOOR LEVEL NUMBER TO BE REPLACED WITH NUMERICAL VALUE OF THE FLOOR

STAIR SIGNS FOR ALL LEVELS ABOVE THE EXIT DISCHARGE LEVEL SHALL INDICATE THE FLOOR NUMBER. STAIR FLOOR LEVEL SIGNS ARE REQUIRED FOR BUILDINGS WITH MORE THAN THREE STORIES, PER CHAPTER TEN SECTION 1023.9.1 OF THE INTERNATIONAL BUILDING CODE (IBC)

## STAIR SIGNAGE

SCALE: N.T.S.

SEE PLANS FOR STAIR SIGN LOCATION IN PLAN. SEE SHT. AC-1 SIGN LOCATION DETAIL FOR MOUNTING HEIGHT AND POSITION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PROJECT:

TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

ACCESSIBLE SIGNAGE DETAILS

DATE: 06/26/2026
REVISED:

GEORGE J. KONTOGIANNIS REGISTERED No. AR00034309 STATE OF INDIANA ARCHITECT

GEORGE J. KONTOGIANNIS, LICENSE #AR00034309
EXPIRATION DATE 12/31/2027


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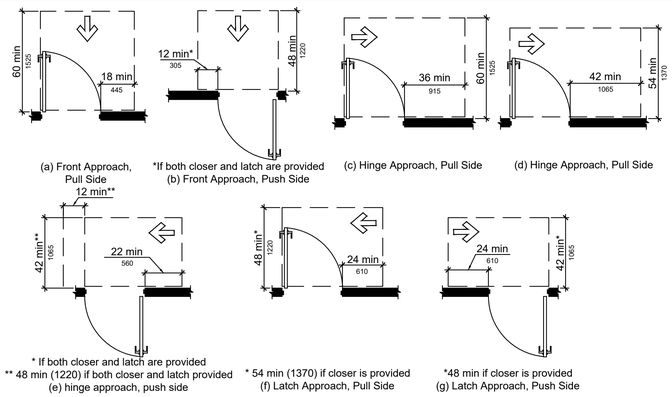
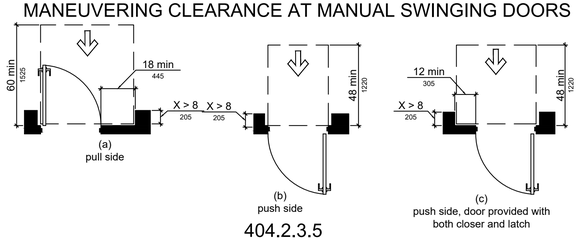
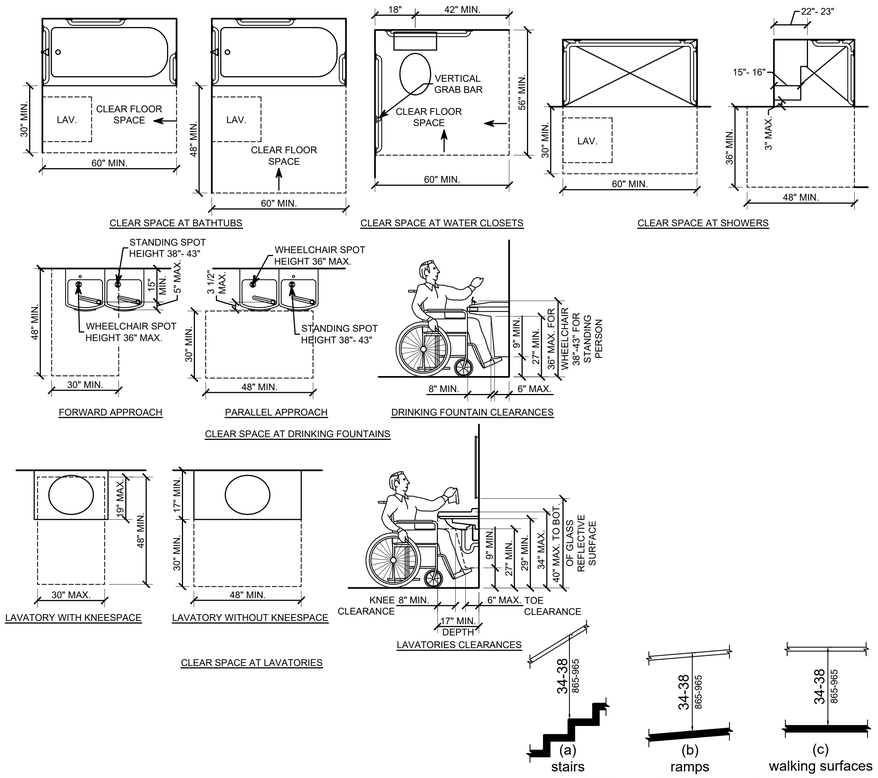



404.2.3.2
MANEUVERING CLEARANCE AT MANUAL SWINGING DOORS

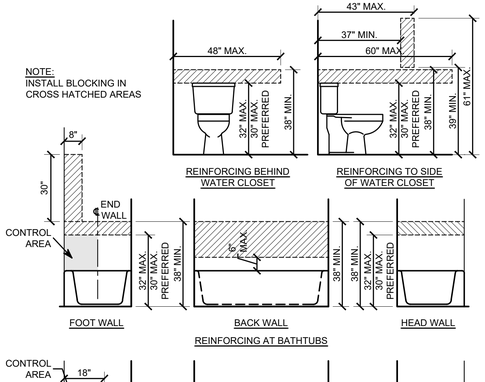



404.2.3.5
MANEUVERING CLEARANCE AT RECESSED DOORS



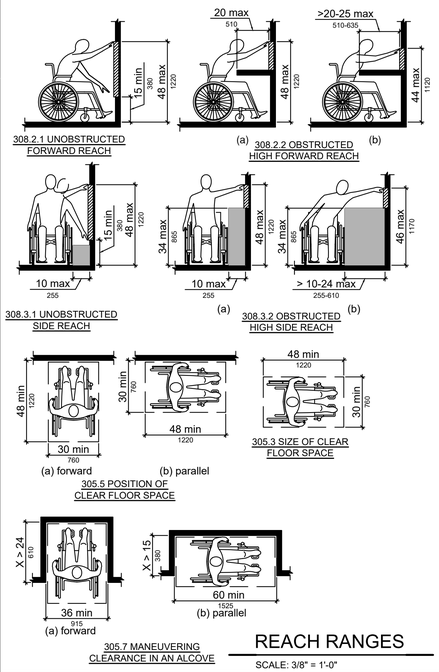

CLEARANCES

SCALE: 3/8" = 1'-0"



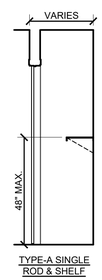

BLOCKING DETAILS

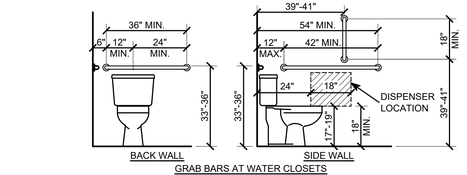
SCALE: 3/8" = 1'-0"




REACH RANGES

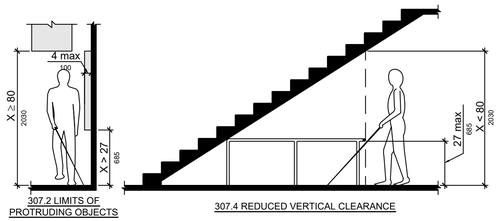
SCALE: 3/8" = 1'-0"



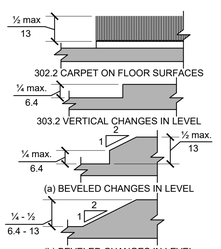

GRAB BAR LOCATIONS

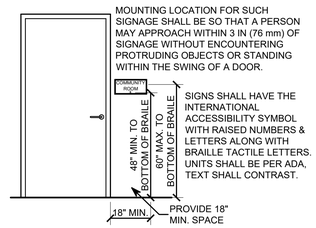
SCALE: 3/8" = 1'-0"




PROTRUDING OBJECTS

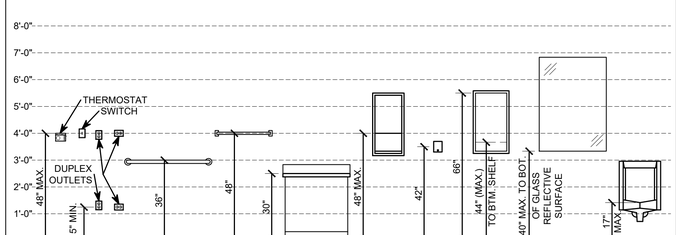
SCALE: 3/8" = 1'-0"




SIGNAGE LOCATION

SCALE: 3/8" = 1'-0"




STANDARD HEIGHTS

SCALE: 3/8" = 1'-0"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PROJECT:

# TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

## ACCESSIBLE STANDARDS

DATE: 06/26/2026
REVISED:

GEORGE J. KONTOGIANNIS REGISTERED No. AR00034309 STATE OF INDIANA ARCHITECT

GEORGE J. KONTOGIANNIS, LICENSE #AR00034309
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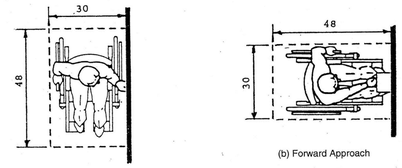
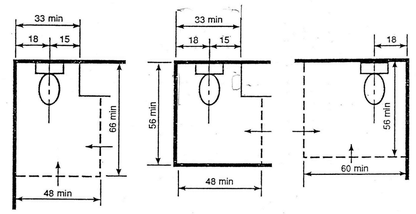
## MANEUVERABILITY & CLEAR FLOOR SPACE



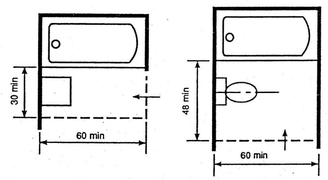

(a) Parallel Approach

(b) Forward Approach

Fig. 6 Minimum Clear Floor Space for Wheelchairs

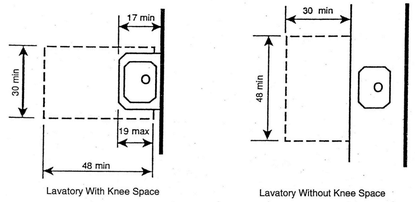



(a) Clear Floor Space for Water Closets




(b) Clear Floor Space at Bathtubs

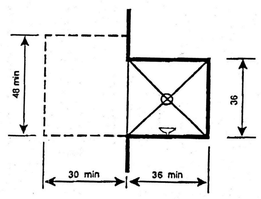
Fig. 7 Clear Floor Space for Adaptable Bathrooms




Lavatory With Knee Space

Lavatory Without Knee Space

(c) Clear Floor Space at Lavatories




(d) Clear Floor Space at Shower

Fig. 7 Clear Floor Space for Adaptable Bathrooms

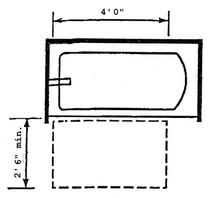



Fig. 8 Alternative Specification - Clear Floor Space at Bathtub

NOTE: Clear floor space beside tub may overlap with clear floor space beneath adjacent fixtures.

APPLIES TO ALL UNITS EXCEPT 504

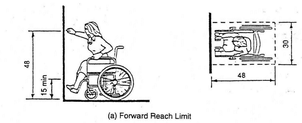
## MOUNTING HEIGHT & REACH RANGES

SWITCHES, OUTLETS AND CONTROLS MOUNTING HEIGHTS

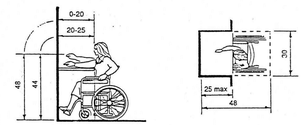
OUTLETS - MOUNT AT A MINIMUM OF 15" A.F.F.
MOUNT AT A MAXIMUM OF 48" A.F.F. IN KITCHENS FOR SIDE REACH OVER COUNTER.

LIGHT SWITCHES - MOUNT AT A MAXIMUM OF 48" A.F.F.

THERMOSTATS - MOUNT AT A MAXIMUM OF 48" A.F.F.

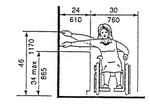



(a) Forward Reach Limit




NOTE: Clear knee space should be as deep as the reach distance.

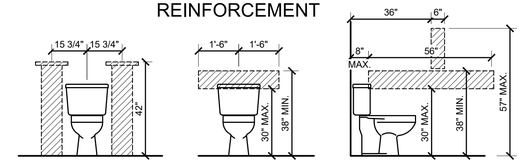
(b) Maximum Forward Reach Over an Obstruction




(c) Maximum Side Reach Over Obstruction

Fig. 2 Reach Ranges

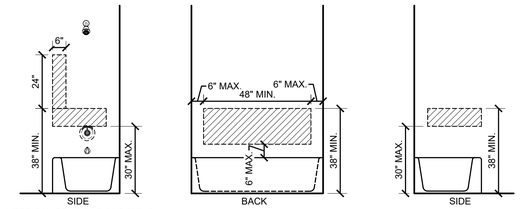
## GRAB BAR REINFORCEMENT




REINFORCED AREAS FOR INSTALLATION OF GRAB BARS W.C. NOT ADJACENT TO WALL

REINFORCED AREAS FOR INSTALLATION OF GRAB BARS W.C. ADJACENT TO WALL

FIG. 3 WATER CLOSETS IN ADAPTABLE BATHROOMS



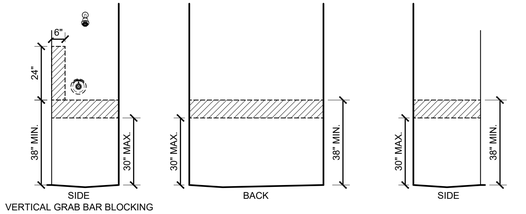

SIDE
VERTICAL GRAB BAR BLOCKING AT CONTROL WALL

BACK

SIDE

FIG. 4 LOCATION OF GRAB BAR REINFORCEMENTS FOR ADAPTABLE BATHTUBS

NOTE: THE AREAS OUTLINED IN DASHED LINES REPRESENT LOCATIONS FOR FUTURE INSTALLATION OF GRAB BARS FOR TYPICAL FIXTURE CONFIGURATIONS




SIDE
VERTICAL GRAB BAR BLOCKING AT CONTROL WALL

BACK

SIDE

FIG. 5 LOCATION OF GRAB BAR REINFORCEMENTS FOR ADAPTABLE SHOWERS

NOTE: THE AREAS OUTLINED IN DASHED LINES REPRESENT LOCATIONS FOR FUTURE INSTALLATION OF GRAB BARS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PROJECT:

# TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

FAIR HOUSING & ANSI A 117.1 DETAILS

DATE: 06/26/2026
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GEORGE J. KONTOGIANNIS REGISTERED No. AR00034309 STATE OF INDIANA ARCHITECT

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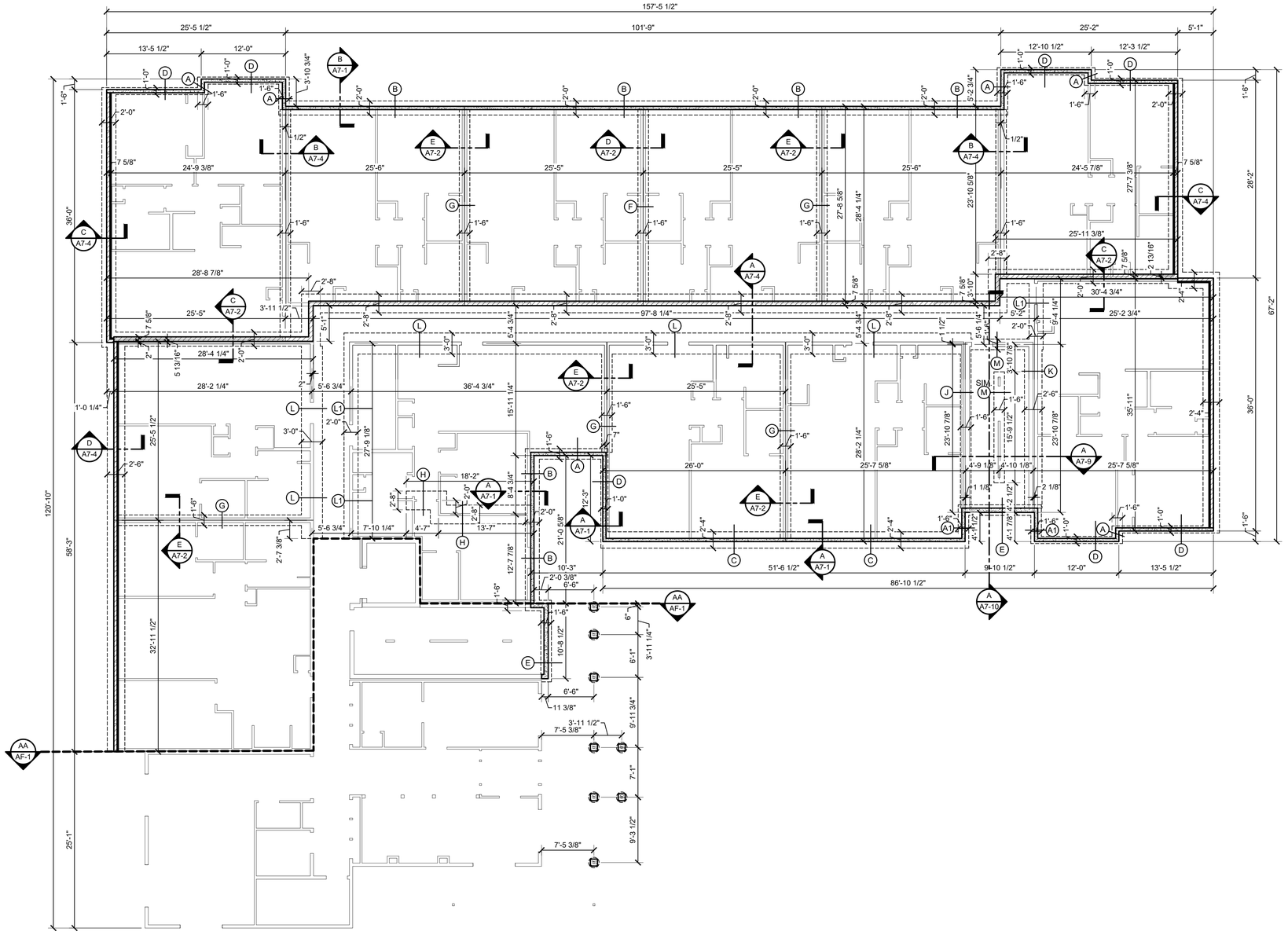
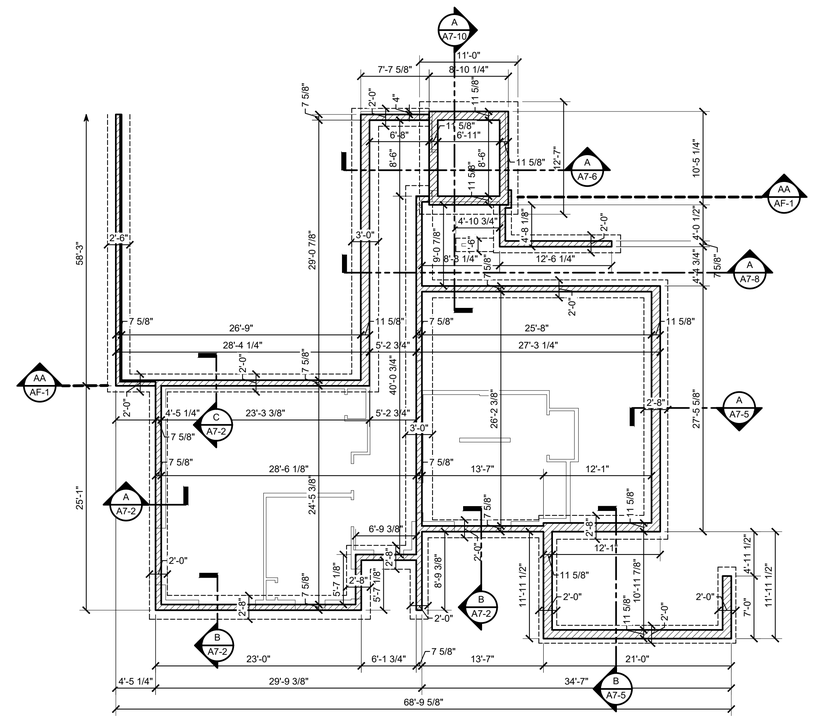



FIRST FLOOR FOUNDATION PLAN

SCALE: 1/8" = 1'-0"




GROUND FLOOR FOUNDATION PLAN

SCALE: 1/8" = 1'-0"

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PROJECT:
TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:
FOUNDATION PLANS

GEORGE J. KONTOGIANNIS REGISTERED No. AR00034309 STATE OF INDIANA ARCHITECT

DATE: 06/26/2026
REVISED:

GEORGE J. KONTOGIANNIS, LICENSE #AR00034309
EXPIRATION DATE 12/31/2027

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AF-1

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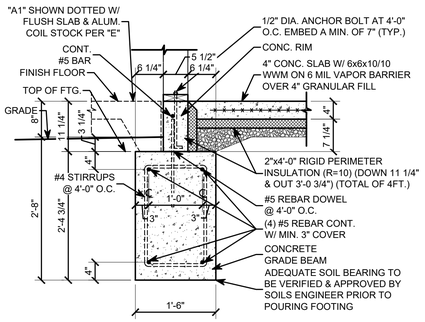


## FOUNDATION DETAIL A A1

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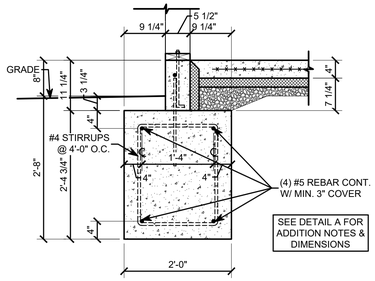


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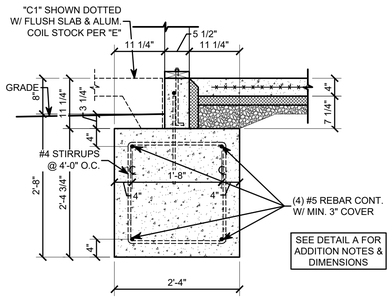


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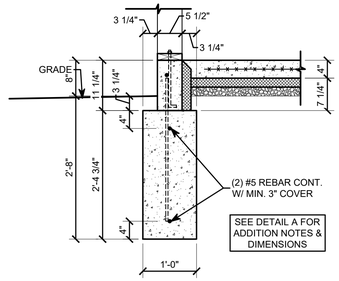


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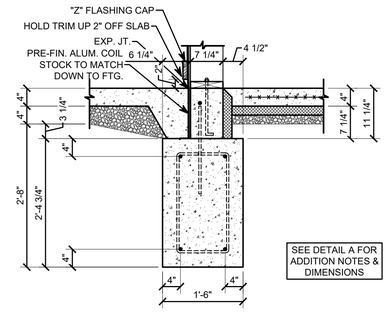
SCALE: 3/4" = 1'-0"

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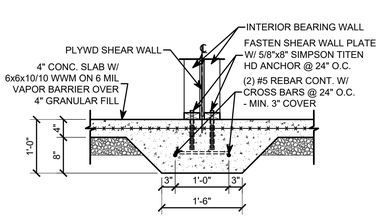
SCALE: 3/4" = 1'-0"

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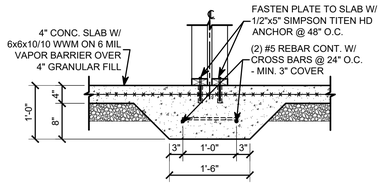
SCALE: 3/4" = 1'-0"




## FOUNDATION DETAIL G

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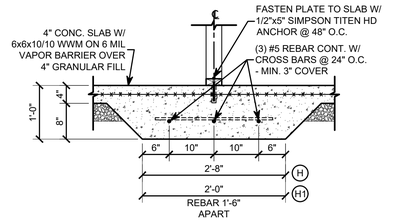
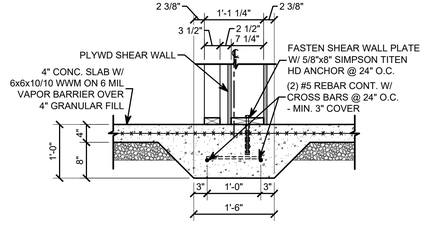



## FOUNDATION DETAIL H H1

SCALE: 3/4" = 1'-0"

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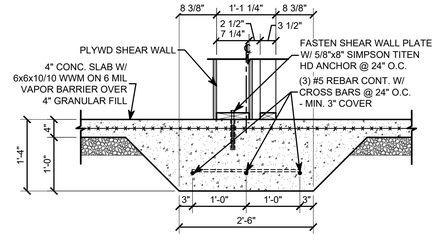
SCALE: 3/4" = 1'-0"

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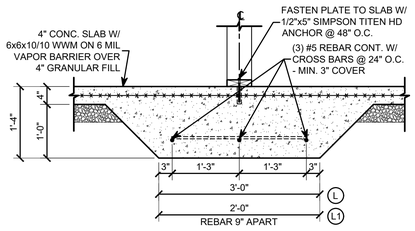
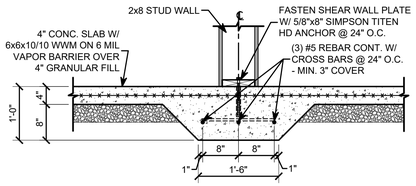
SCALE: 3/4" = 1'-0"




## FOUNDATION DETAIL L L1

SCALE: 3/4" = 1'-0"

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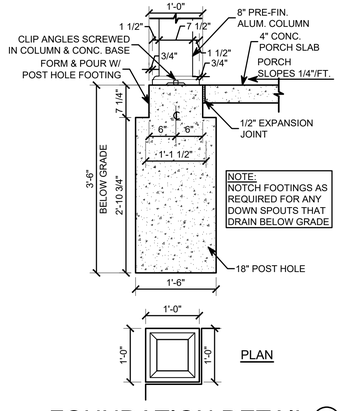
SCALE: 3/4" = 1'-0"

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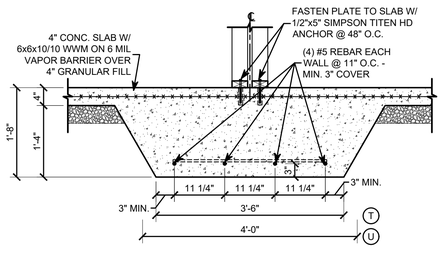
SCALE: 3/4" = 1'-0"




## FOUNDATION DETAIL T U

SCALE: 3/4" = 1'-0"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PROJECT:

TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

FOUNDATION DETAILS

DATE: 06/26/2026
REVISED:

GEORGE J. KONTOGIANNIS REGISTERED No. AR00034309 STATE OF INDIANA ARCHITECT

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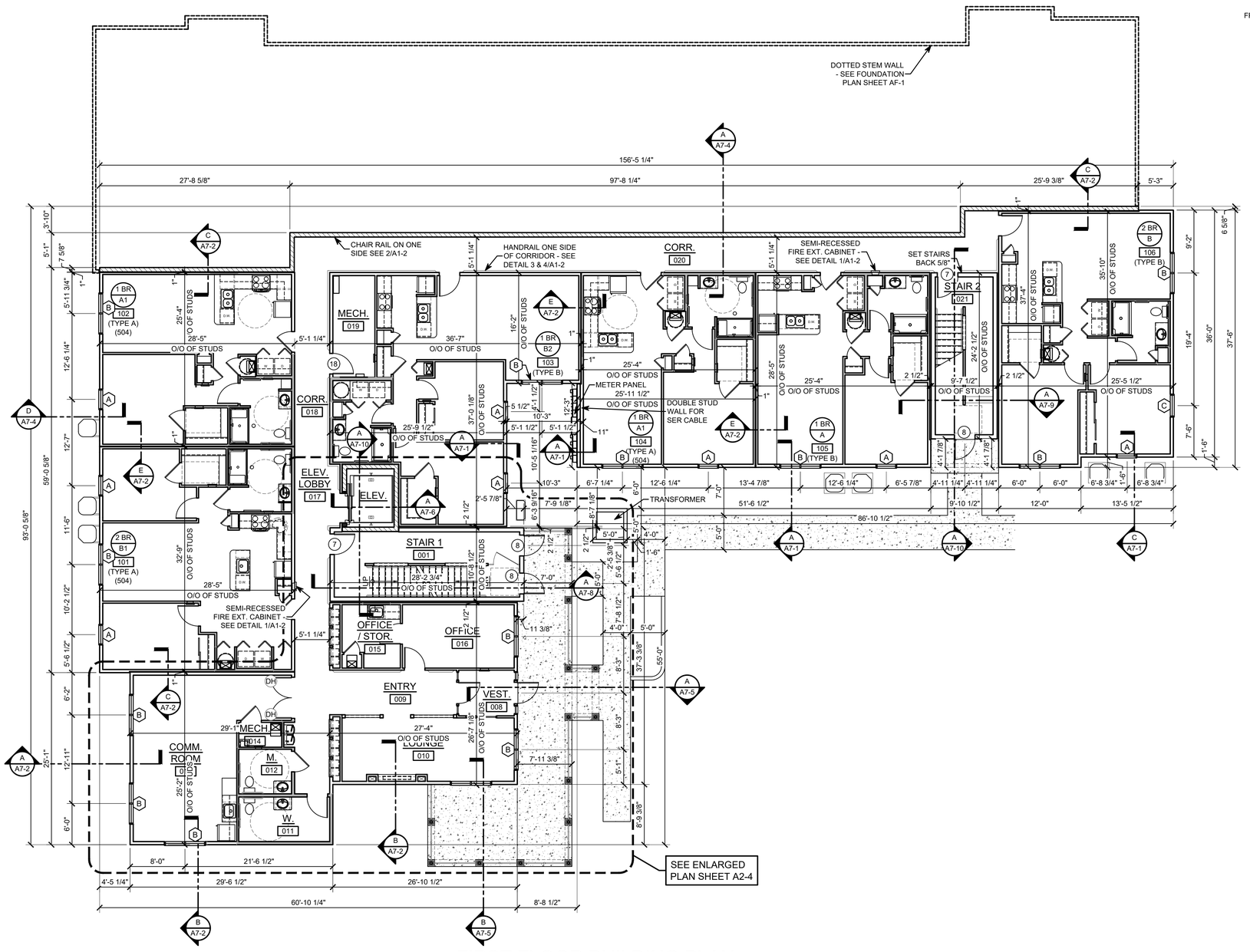
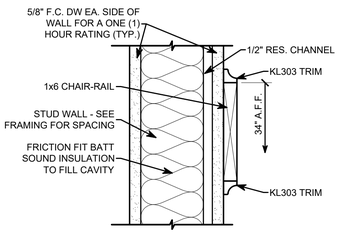


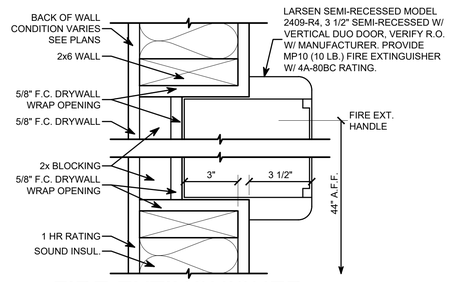

## FIRST FLOOR BUILDING PLAN

SCALE: 1/8" = 1'-0" 8,138 GROSS SQ.FT.



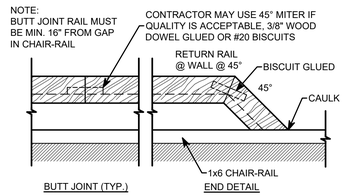

## CHAIR RAIL DETAIL 2

SCALE: 3" = 1'-0"



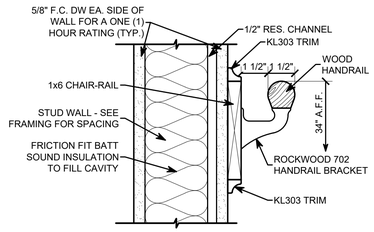

## FIRE EXTINGUISHER CABINET SECTION DETAIL 1

SCALE: 3" = 1'-0"




## HANDRAIL DETAIL 4

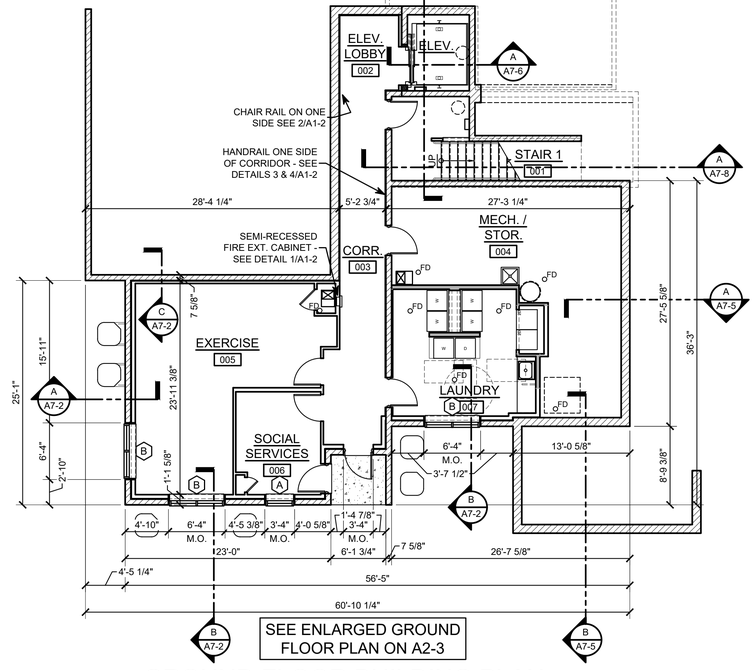
SCALE: 3" = 1'-0"




## HANDRAIL DETAIL 3

SCALE: 3" = 1'-0"

| | |
|---|---|
| GROUND FLOOR GROSS = | 1,912 SQ.FT. |
| FIRST FLOOR GROSS = | 8,138 SQ.FT. |
| SECOND FLOOR GROSS = | 12,601 SQ.FT. |
| THIRD FLOOR GROSS = | 12,601 SQ.FT. |
| FOURTH FLOOR GROSS = | 11,142 SQ.FT. |
| TOTAL BUILDING GROSS = | 46,394 SQ.FT. |




## GROUND FLOOR BUILDING PLAN

SCALE: 1/8" = 1'-0" 1,912 GROSS SQ.FT.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PROJECT:
TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:
GROUND & FIRST FLOOR BUILDING PLANS & DETAILS

GEORGE J. KONTOGIANNIS REGISTERED No. AR00034309 STATE OF INDIANA ARCHITECT

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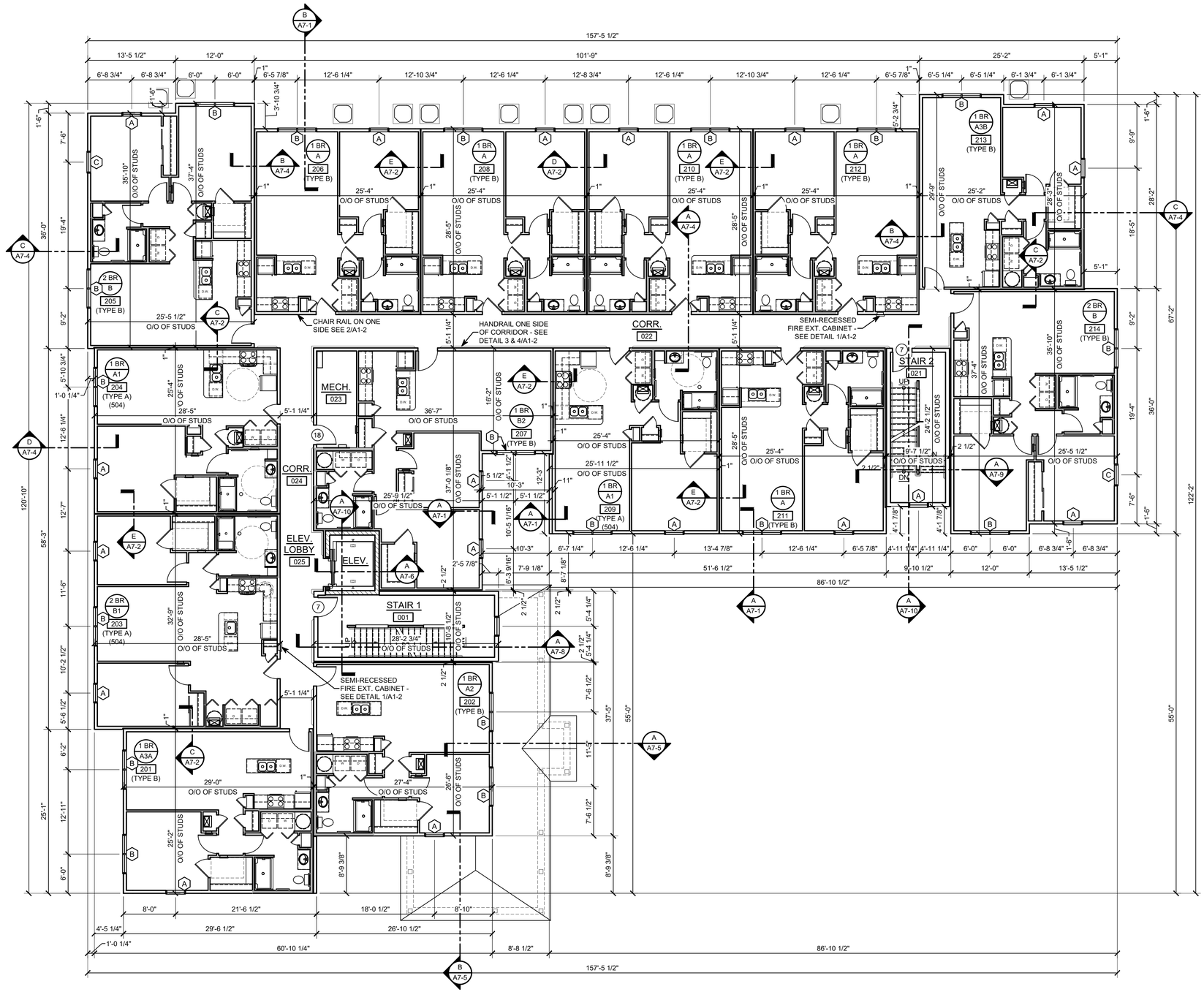


## SECOND FLOOR BUILDING PLAN

SCALE: 1/8" = 1'-0" 12,601 GROSS SQ.FT.


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PROJECT:

# TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

SECOND FLOOR BUILDING PLAN

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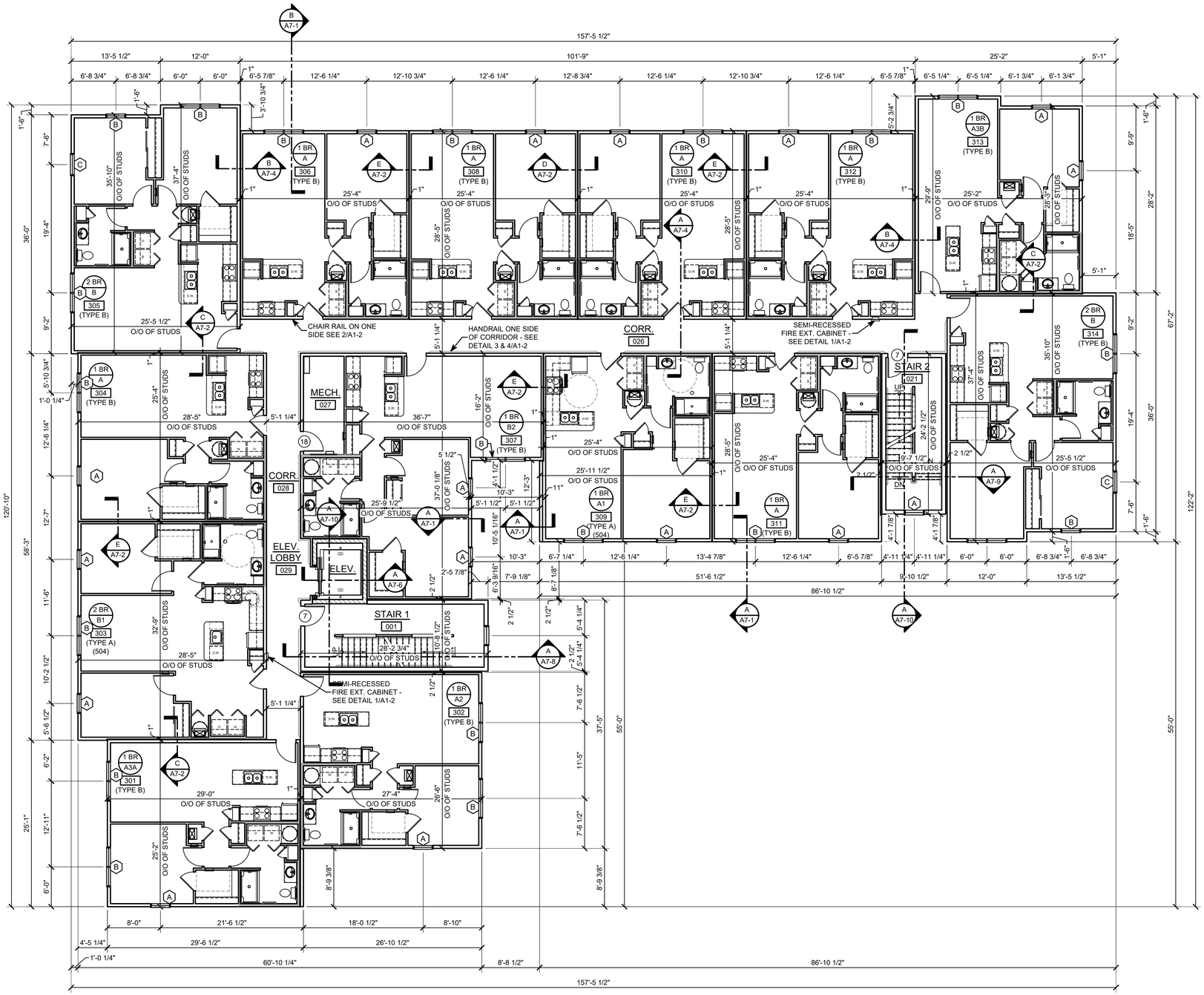


# THIRD FLOOR BUILDING PLAN

SCALE: 1/8" = 1'-0"  12,601 GROSS SQ.FT.


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TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
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THIRD FLOOR BUILDING PLAN

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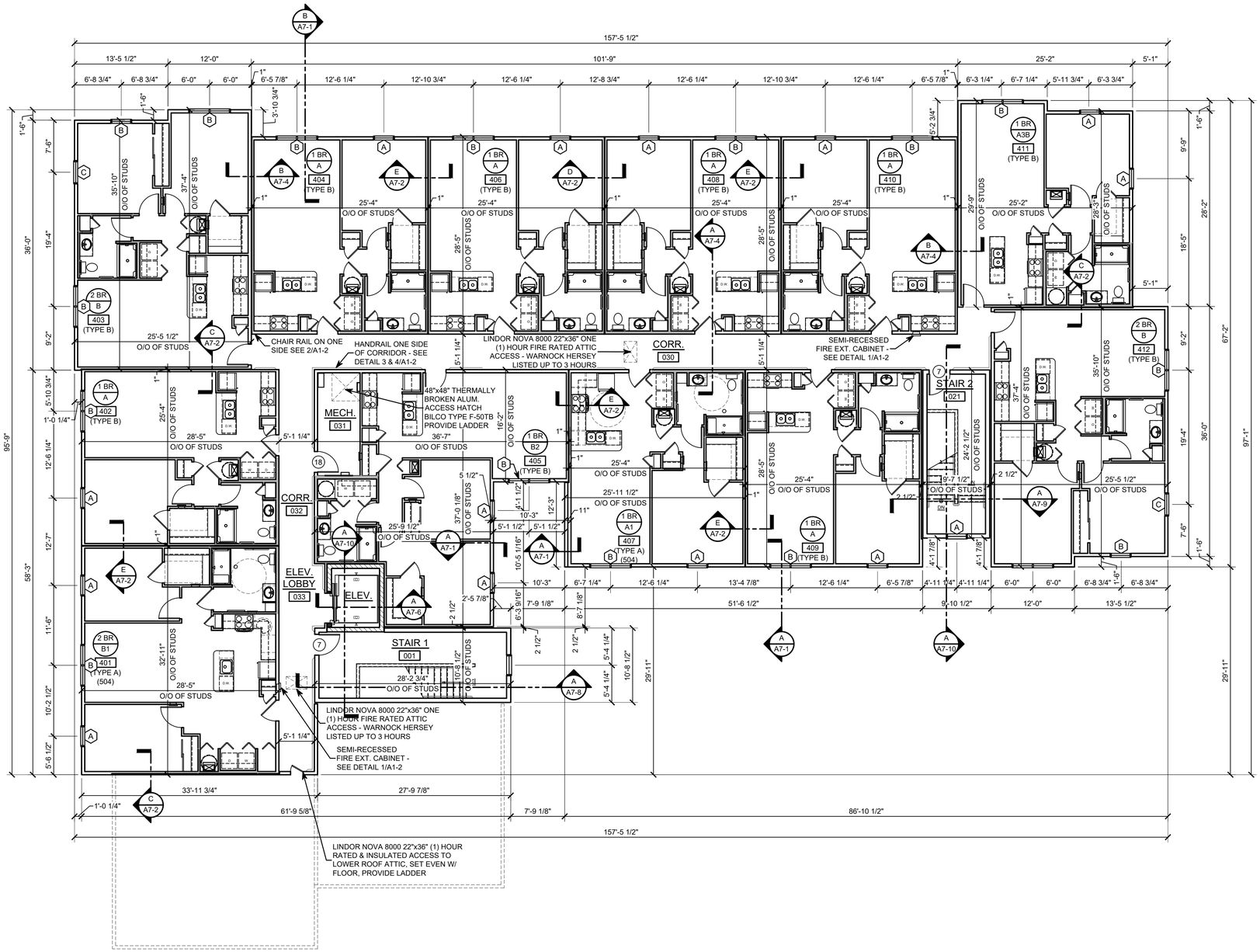


# FOURTH FLOOR BUILDING PLAN

SCALE: 1/8" = 1'-0"  11,142 GROSS SQ.FT.


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PROJECT:

## TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

FOURTH FLOOR BUILDING PLAN

DATE: 06/26/2026
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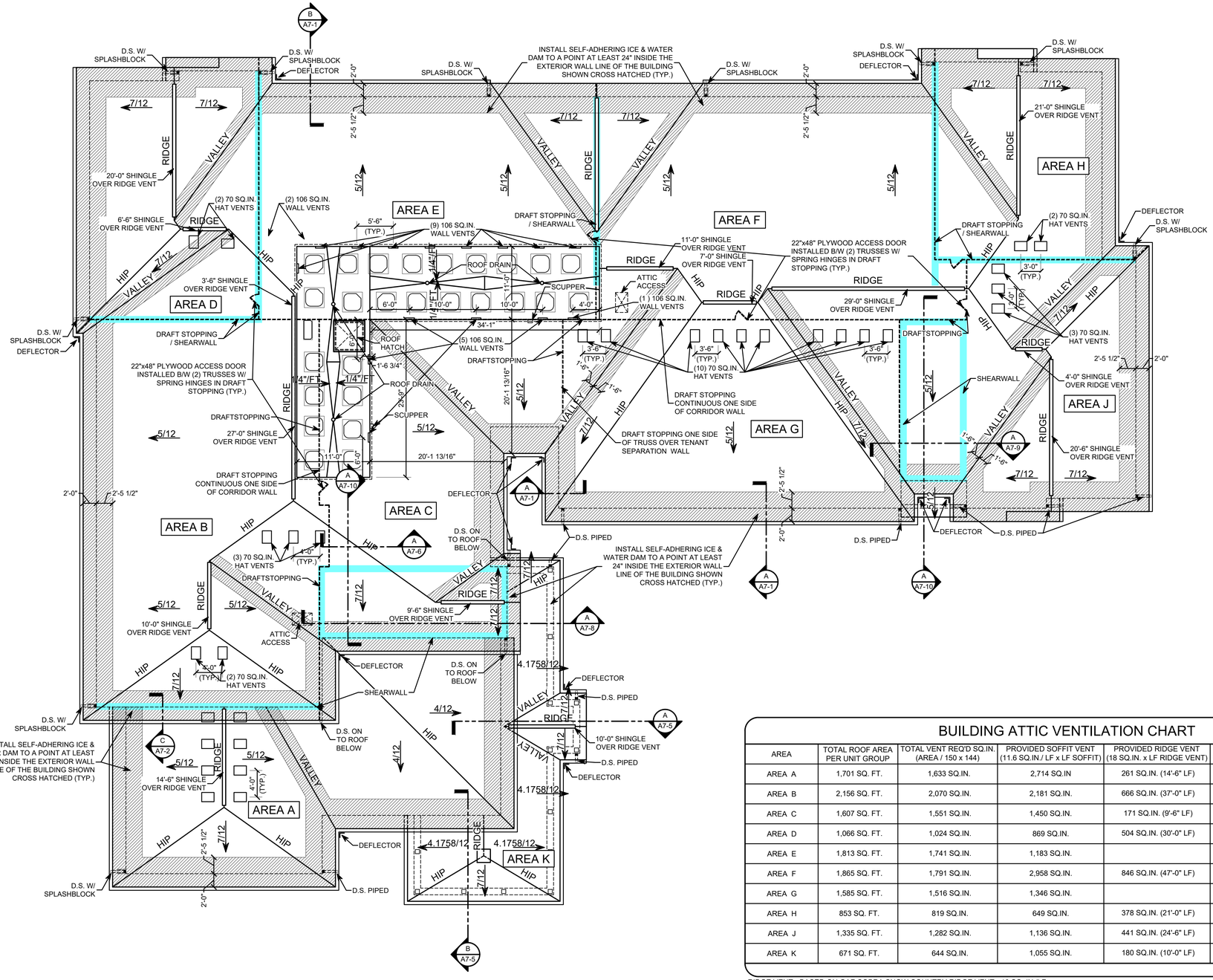


# BUILDING ROOF PLAN

SCALE: 1/8" = 1'-0"

## BUILDING ATTIC VENTILATION CHART

| AREA | TOTAL ROOF AREA PER UNIT GROUP | TOTAL VENT REQ'D SQ.IN. (AREA / 150 x 144) | PROVIDED SOFFIT VENT (11.6 SQ.IN./ LF x LF SOFFIT) | PROVIDED RIDGE VENT (18 SQ.IN. x LF RIDGE VENT) | PROVIDED HAT OR WALL VENT (70 OR 106 SQ.IN. EA.) | TOTAL VENT PROVIDED |
|---|---|---|---|---|---|---|
| AREA A | 1,701 SQ. FT. | 1,633 SQ.IN. | 2,714 SQ.IN | 261 SQ.IN. (14'-6" LF) | 8 @ 70 = 560 SQ.IN. | 3,535 SQ.IN. |
| AREA B | 2,156 SQ. FT. | 2,070 SQ.IN. | 2,181 SQ.IN. | 666 SQ.IN. (37'-0" LF) | 5 @ 70 = 350 SQ.IN. | 3,197 SQ.IN. |
| AREA C | 1,607 SQ. FT. | 1,551 SQ.IN. | 1,450 SQ.IN. | 171 SQ.IN. (9'-6" LF) | 5 @ 106 = 530 SQ.IN. | 2,151 SQ.IN. |
| AREA D | 1,066 SQ. FT. | 1,024 SQ.IN. | 869 SQ.IN. | 504 SQ.IN. (30'-0" LF) | 2 @ 70 = 140 SQ.IN. | 1,513 SQ.IN. |
| AREA E | 1,813 SQ. FT. | 1,741 SQ.IN. | 1,183 SQ.IN. | | 9 @ 106 = 954 SQ.IN. | 2,137 SQ.IN. |
| AREA F | 1,865 SQ. FT. | 1,791 SQ.IN. | 2,958 SQ.IN. | 846 SQ.IN. (47'-0" LF) | | 3,804 SQ.IN. |
| AREA G | 1,585 SQ. FT. | 1,516 SQ.IN. | 1,346 SQ.IN. | | 1 @ 106 = 106 SQ.IN. + 10 @ 70 = 700 SQ.IN. = 806 SQ.IN. | 2,152 SQ.IN. |
| AREA H | 853 SQ. FT. | 819 SQ.IN. | 649 SQ.IN. | 378 SQ.IN. (21'-0" LF) | 2 @ 70 = 140 SQ.IN. | 1,167 SQ.IN. |
| AREA J | 1,335 SQ. FT. | 1,282 SQ.IN. | 1,136 SQ.IN. | 441 SQ.IN. (24'-6" LF) | 3 @ 70 = 210 SQ.IN. | 1,787 SQ.IN. |
| AREA K | 671 SQ. FT. | 644 SQ.IN. | 1,055 SQ.IN. | 180 SQ.IN. (10'-0" LF) | | 1,235 SQ.IN. |

RIDGE VENT - BASED ON GAF COBRA SNOW COUNTRY RIDGE VENT - 18 SQ. IN./LF
HAT VENT - BASED ON LOMANCO VENTS 770 SERIES - 70 SQ. IN EA. OR P60 PRO - 60 SQ.IN. EA.
SOFFIT VENT - BASED ON ALSIDE HT 12" PRE-FINISHED ALUMINUM T4 AERATED SOFFIT - 11.6 SQ. IN./LF. & SQ.FT.
WALL VENT - BASED ON LOMANCO VENTS 100 SERIES - 106 SQ. IN. EA. - (17"x22", 14"x18" F.A.) W/ SCREEN


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PROJECT:

# TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

BUILDING ROOF PLAN

DATE: 06/26/2026
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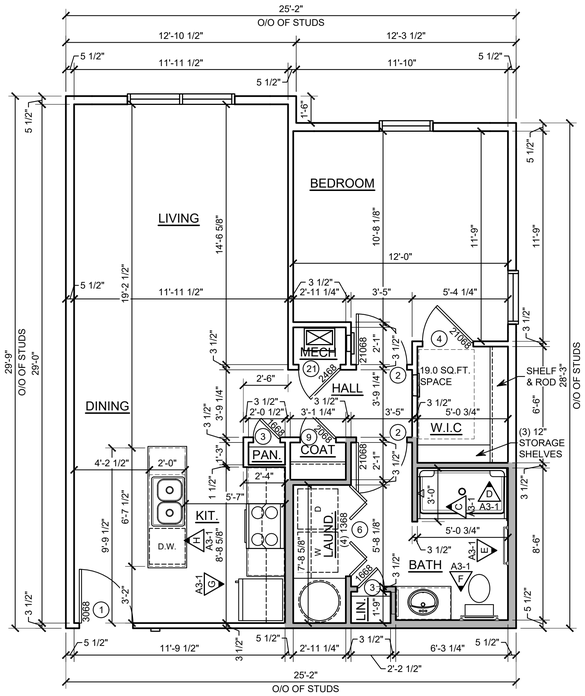
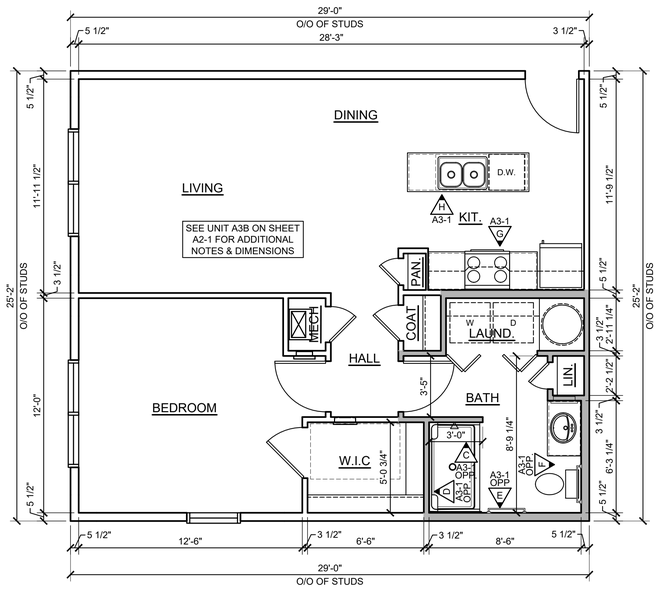



ONE BEDROOM (TYPE B) UNIT A3B

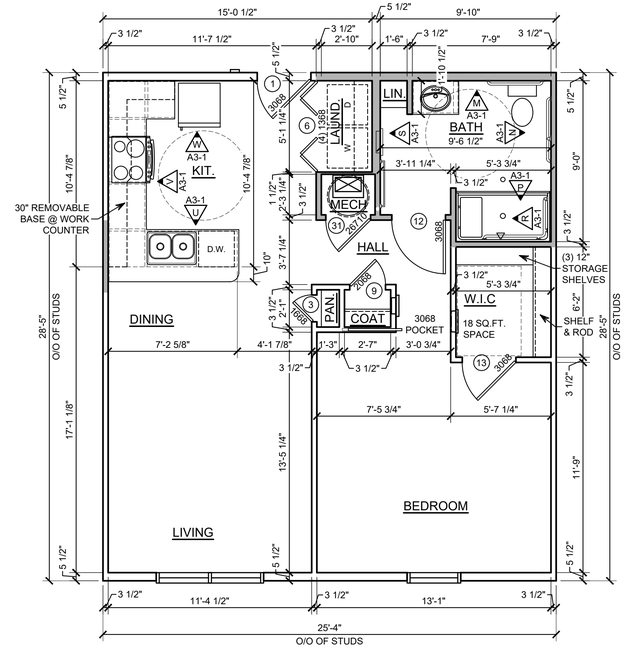
SCALE: 1/4" = 1'-0" NET AREA = 684 SQ.FT.

SEE PI-1 FOR DEVELOPMENT AMENITIES AND UNIVERSAL DESIGN CODED NOTES



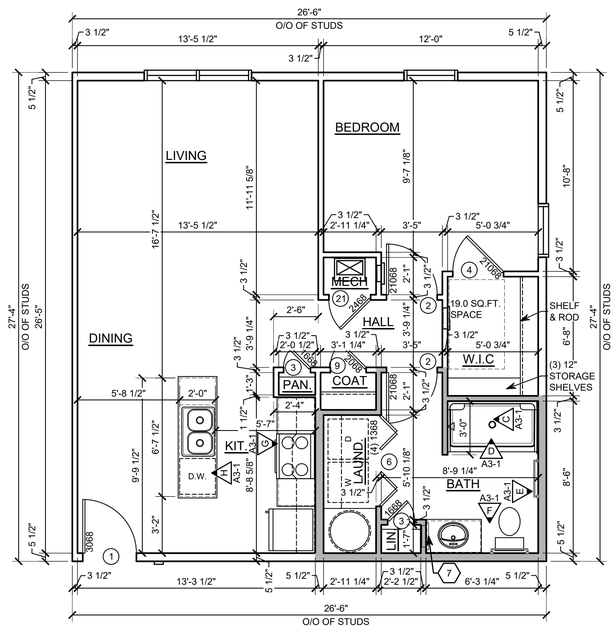

ONE BEDROOM (TYPE B) UNIT A3A

SCALE: 1/4" = 1'-0" NET AREA = 684 SQ.FT.



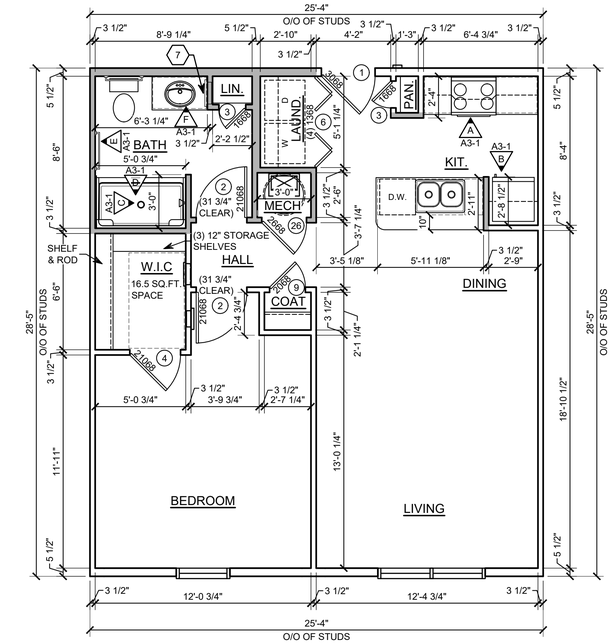

ONE BEDROOM (TYPE A) (504) UNIT A1

SCALE: 1/4" = 1'-0" NET AREA = 681 SQ.FT.




ONE BEDROOM (TYPE B) UNIT A2

SCALE: 1/4" = 1'-0" NET AREA = 684 SQ.FT.




ONE BEDROOM (TYPE B) UNIT A

SCALE: 1/4" = 1'-0" NET AREA = 681 SQ.FT.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E-MAIL: architects@kontogiannis.com


PROJECT:

# TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

## 1/4" UNIT PLANS

DATE: 06/26/2026
REVISED:

GEORGE J. KONTOGIANNIS REGISTERED No. AR00034309 STATE OF INDIANA ARCHITECT

GEORGE J. KONTOGIANNIS, LICENSE #AR00034309
EXPIRATION DATE 12/31/2027


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A2-1

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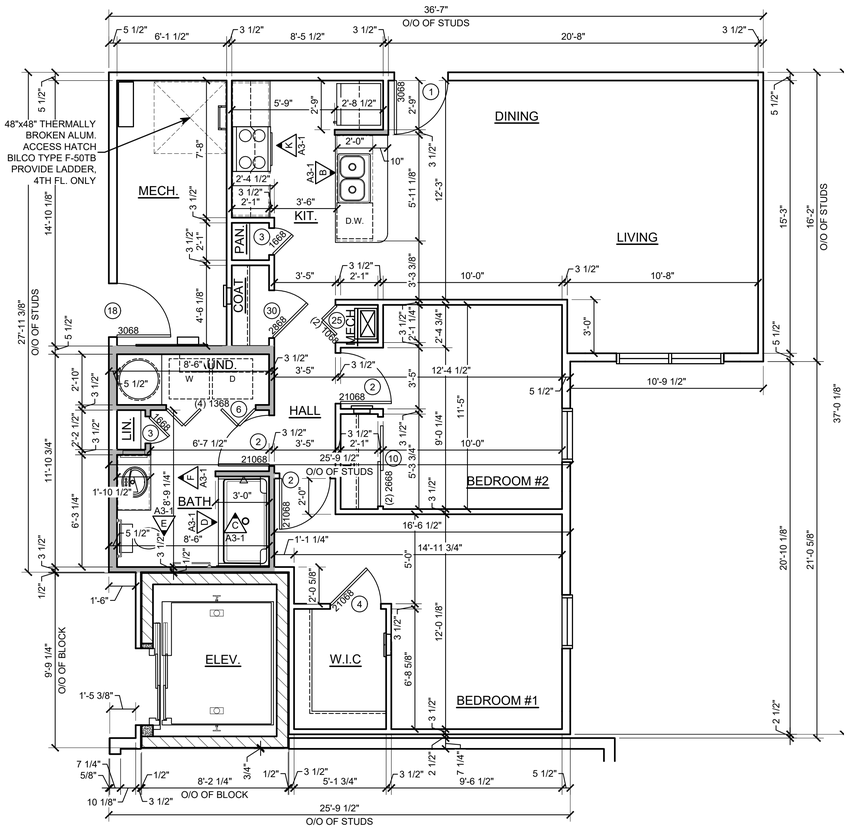
SEE PI-1 FOR DEVELOPMENT AMENITIES AND UNIVERSAL DESIGN CODED NOTES




TWO BEDROOM (TYPE B) UNIT B2

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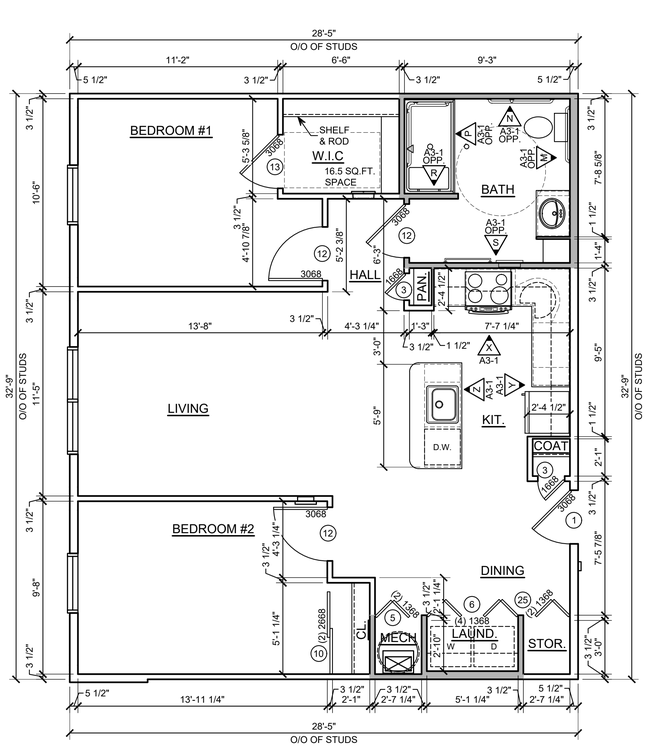
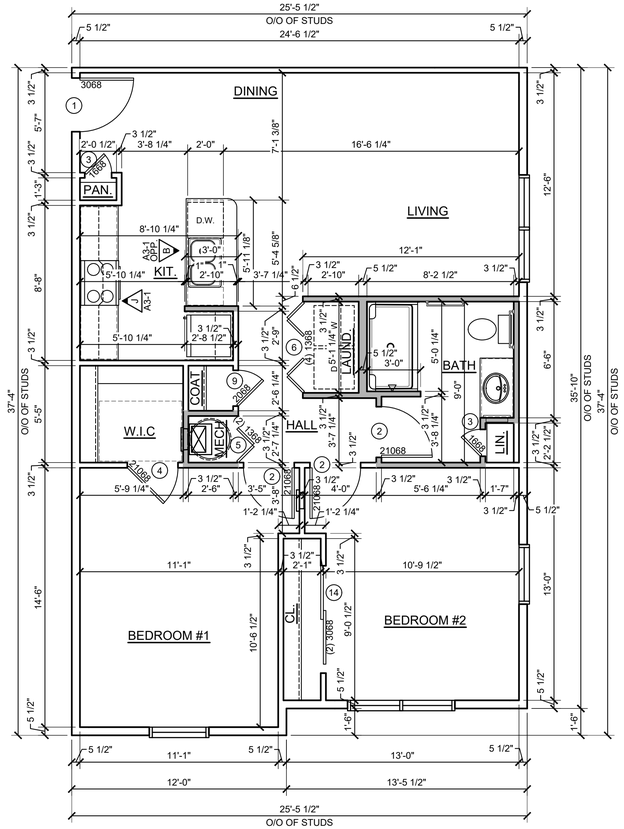



TWO BEDROOM (TYPE A) (504) UNIT B1

SCALE: 1/4" = 1'-0" NET AREA = 885 SQ.FT.




TWO BEDROOM (TYPE B) UNIT B

SCALE: 1/4" = 1'-0" NET AREA = 878 SQ.FT.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PROJECT:

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58 DOUGHTY ROAD,
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DRAWING TITLE:

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A2-2

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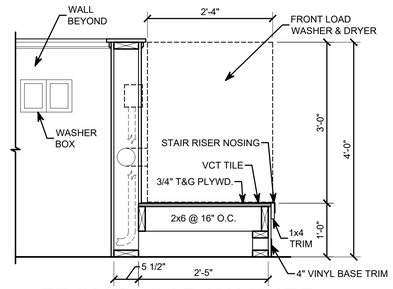
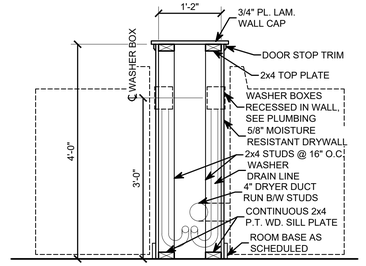


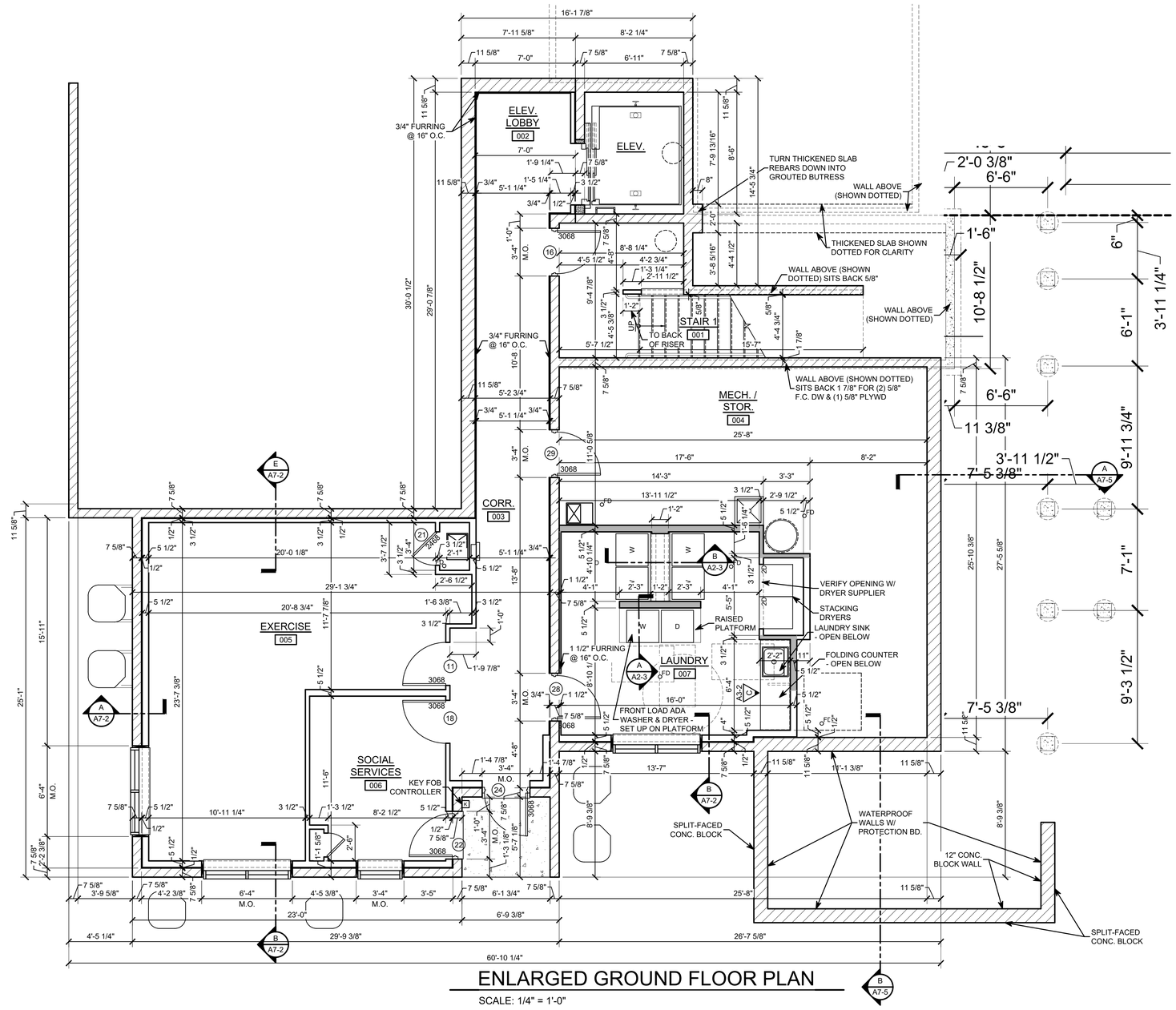

## FRONT LOAD WASHER / DRYER PLATFORM (A)

SCALE: 3/4" = 1'-0"




## WASHER / DRYER KNEE-WALL SECTION (B)

SCALE: 3/4" = 1'-0"




## ENLARGED GROUND FLOOR PLAN

SCALE: 1/4" = 1'-0"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PROJECT:

# TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

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A2-3


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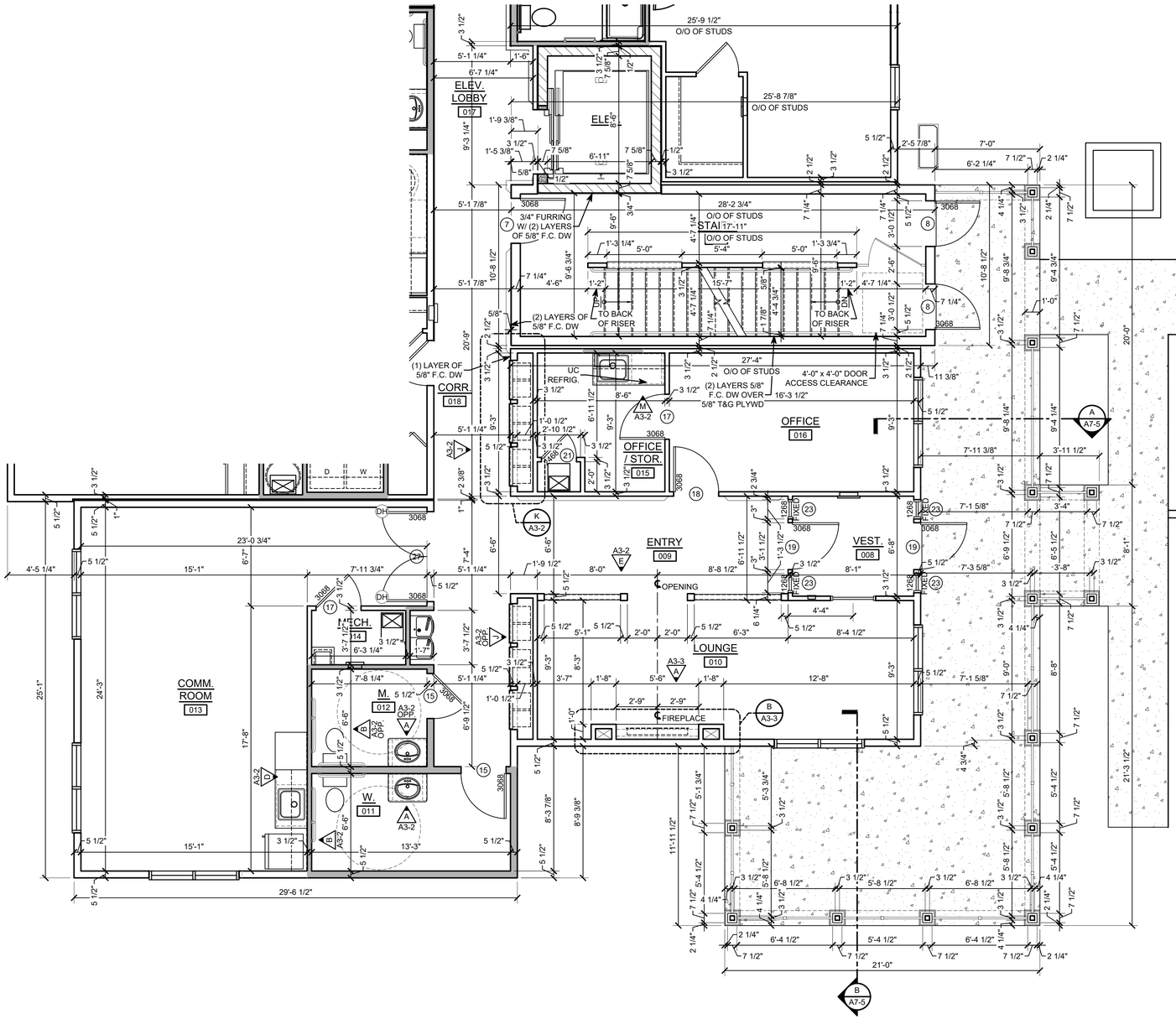


# ENLARGED FIRST FLOOR PLAN

SCALE: 1/4" = 1'-0"


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PROJECT:

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A2-4


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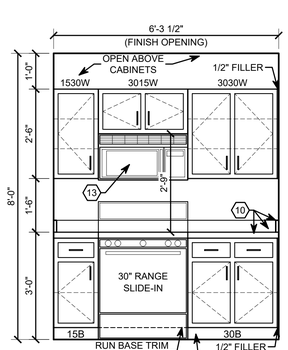
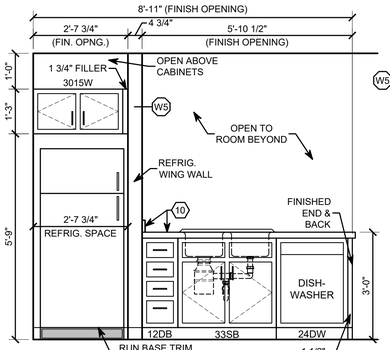


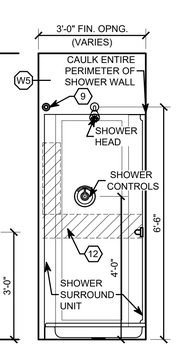

A KITCHEN ELEVATION

SCALE: 1/2" = 1'-0"




B KITCHEN ELEVATION

SCALE: 1/2" = 1'-0"




C BATH ELEVATION

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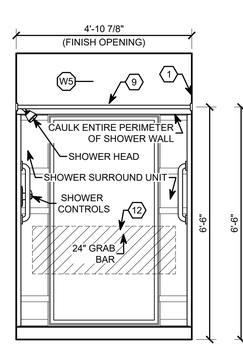


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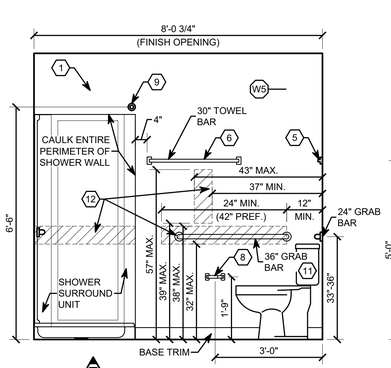
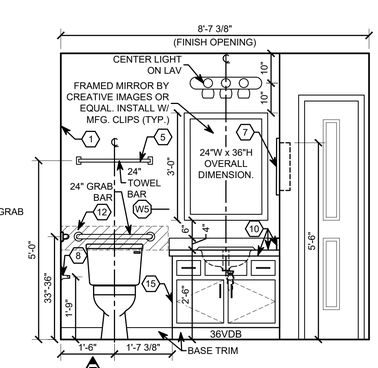


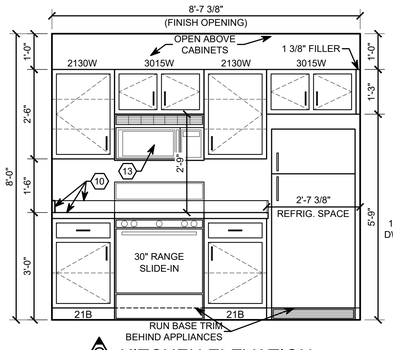

E BATH ELEVATION

SCALE: 1/2" = 1'-0"




F BATH ELEVATION

SCALE: 1/2" = 1'-0"




G KITCHEN ELEVATION

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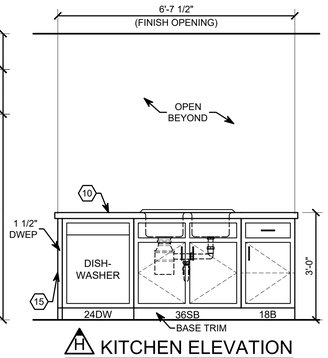
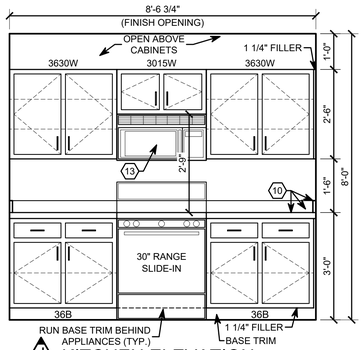



H KITCHEN ELEVATION

SCALE: 1/2" = 1'-0"




J KITCHEN ELEVATION

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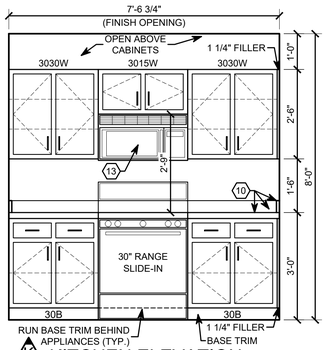


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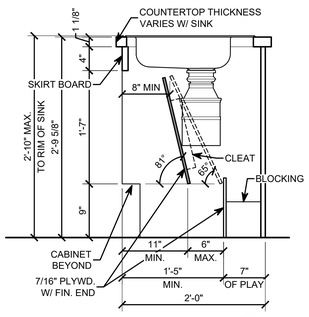
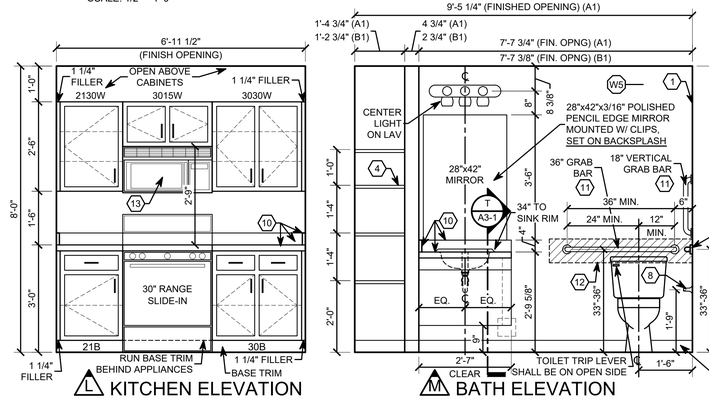



CABINET SECTION K1

SCALE: 1" = 1'-0"

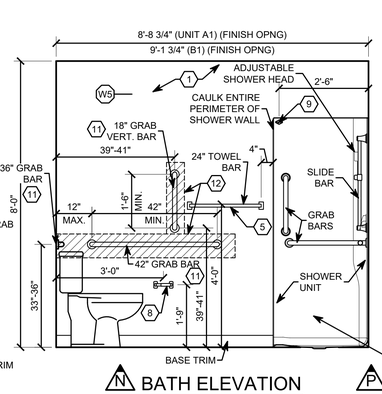



L KITCHEN ELEVATION

SCALE: 1/2" = 1'-0"

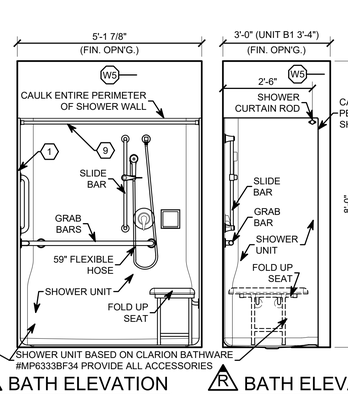
M BATH ELEVATION

SCALE: 1/2" = 1'-0"




N BATH ELEVATION

SCALE: 1/2" = 1'-0"




P BATH ELEVATION

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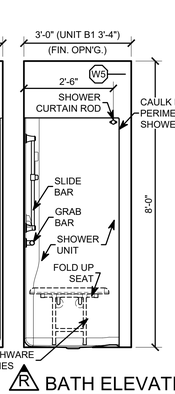


R BATH ELEVATION

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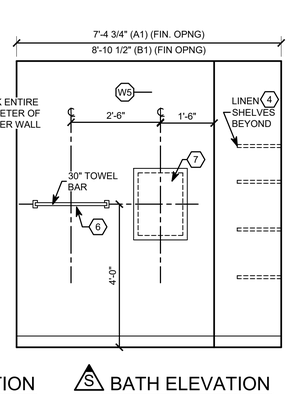


S BATH ELEVATION

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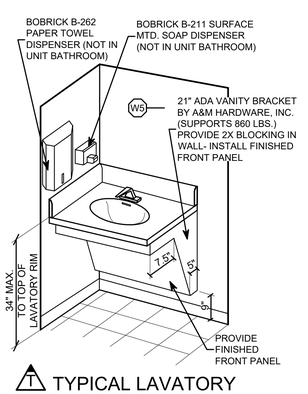
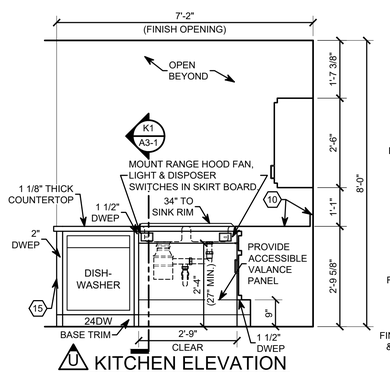


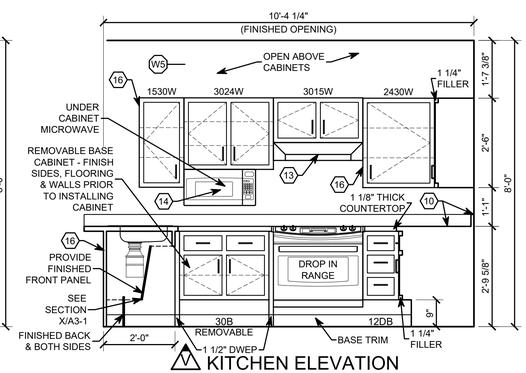

T TYPICAL LAVATORY

SCALE: N.T.S.




U KITCHEN ELEVATION

SCALE: 1/2" = 1'-0"

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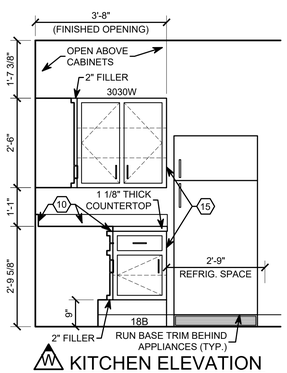
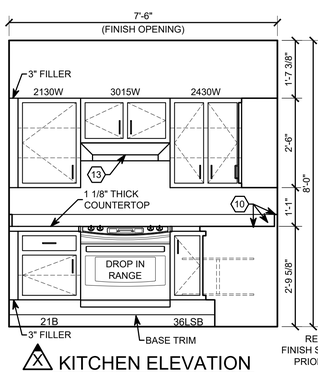
SCALE: 1/2" = 1'-0"



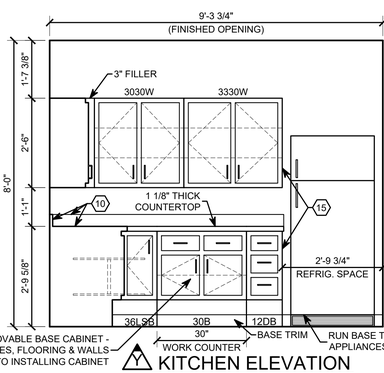

W KITCHEN ELEVATION

SCALE: 1/2" = 1'-0"




X KITCHEN ELEVATION

SCALE: 1/2" = 1'-0"

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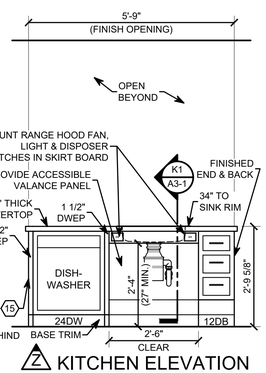
SCALE: 1/2" = 1'-0"




Z KITCHEN ELEVATION

SCALE: 1/2" = 1'-0"

## CODED NOTES

1. IN LOCATIONS WHERE THE BATHROOMS OR SHOWER ABUTS A FIRE RATED CORRIDOR WALL, UNIT SEPARATION WALL OR EXTERIOR WALL, ONE (1) LAYER OF MOISTURE RESISTANT 5/8" F.C. DRYWALL SHALL BE INSTALLED ON THE RATED WALL & TAPE SEALED & MUDDED ON ROUGH COAT PRIOR TO INSTALLING THE UNIT. AFTER INSTALLATION, A SECOND LAYER OF THE SAME SHALL BE INSTALLED OVER THE FLANGES & FINISHED.
2. CLOSET ROD SHELF, 12" DEEP x FULL LENGTH. MOUNT @ 5'-8" A.F.F. ( @ 4'-0" A.F.F. IN 504 UNITS) TO TOP OF SHELF. PROVIDE INTERMEDIATE BRACES FOR SPANS OVER 3'-6".
3. (1) LAUNDRY SHELF 12" DEEP x FULL LENGTH, MOUNT @ 5'-0" A.F.F. ( @ 4'-0" A.F.F. IN 504 UNITS) TO TOP OF SHELF. PROVIDE INTERMEDIATE BRACES FOR SPANS OVER 3'-6".
4. (4) LINEN OR PANTRY SHELVES 12", 16" OR 20" DEEP x FULL LENGTH, SPACE @ 2'-0", 3'-4", 4'-8" & 5'-8" A.F.F.
5. 24" TOWEL BAR, MOUNT @ 5'-0" A.F.F. ( @ 4'-0" A.F.F. IN 504 UNITS) - TAYMOR BATHWARE - MODEL #04-SN6224 PROVIDE 2x6 WOOD BLOCKING BACKUP.
6. 30" TOWEL BAR, MOUNT @ 5'-0" A.F.F. - TAYMORE BATHWARE - MODEL #04-SN6230 PROVIDE 2x6 WOOD BLOCKING BACKUP.
7. RECESSED MEDICINE CABINET - AMERICAN PRIDE - 16" x 22" - #960M22S - MOUNT @ 5'-6" A.F.F. TO TOP (@ 4'-0" A.F.F. TO CENTER IN 504 UNITS), PROVIDE BLOCKING.
8. TOILET PAPER HOLDER, MOUNT @ 1'-9" A.F.F. TO CENTER LINE. TOILET PAPER HOLDER IN APARTMENT UNIT BATH SHALL BE MOEN P5050. MEN'S & WOMEN'S RESTROOM SHALL HAVE BOBRICK B-2888 SURFACE MOUNTED UNIT.
9. 5 FT. SHOWER ROD - HARNEY MFG. #5146608 CURVED STAINLESS STEEL SHOWER ROD W/ FLANGES - PROVIDE 2x6 WOOD BLOCKING BACKUP.
10. PLASTIC LAMINATE TOP W/ 4" BACKSPLASH &/OR SIDESPLASH WHERE APPLICABLE.
11. 36" GRAB BAR - ASI 3800 TYPE-01 - 1 1/2" x 36" S.S. GRAB BAR & 42" GRAB BAR - ASI 3800 TYPE-01 - 1 1/2" x 42" S.S. GRAB BAR & 18" VERTICAL GRAB BAR - ASI 3800 TYPE-01 - 1 1/2" x 18" S.S. GRAB BAR (504 UNIT) - PROVIDE SNAP FLANGE AND BLOCKING FOR ALL GRAB BARS.
12. GRAB BAR BLOCKING - SEE SHEET FH-1 & AC-1.
13. MICROWAVE RANGE HOOD & RANGE HOOD W/ FIRESTOP UNITS.
14. UNDER CABINET MICROWAVE.
15. PROVIDE PRE-FINISHED PLYWOOD PANELS FOR ALL EXPOSED BACKS / SIDES OF CABINETS.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PROJECT:

# TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

## INTERIOR ELEVATIONS

DATE: 06/26/2026
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EXPIRATION DATE 12/31/2027


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**A3-1**


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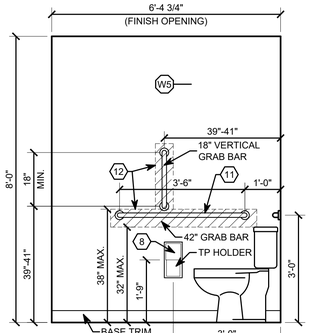
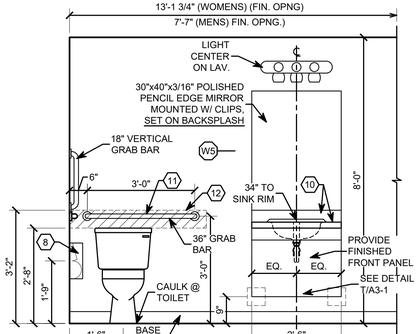


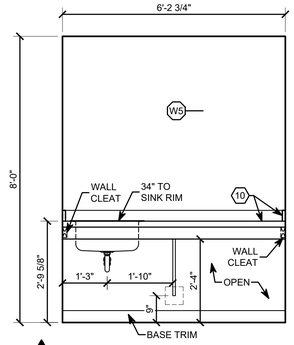

A MEN & WOMEN ELEVATION

SCALE: 1/2" = 1'-0"



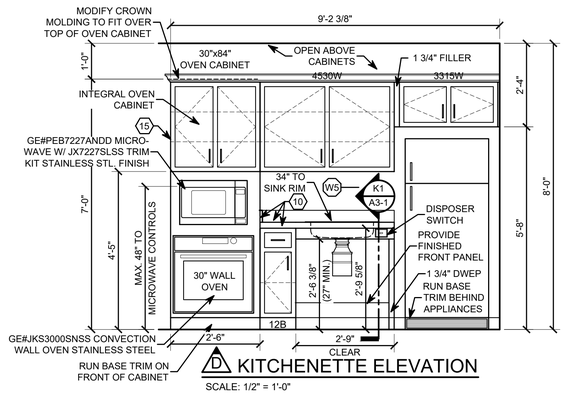

B WOMEN ELEVATION (MEN SIM.)

SCALE: 1/2" = 1'-0"



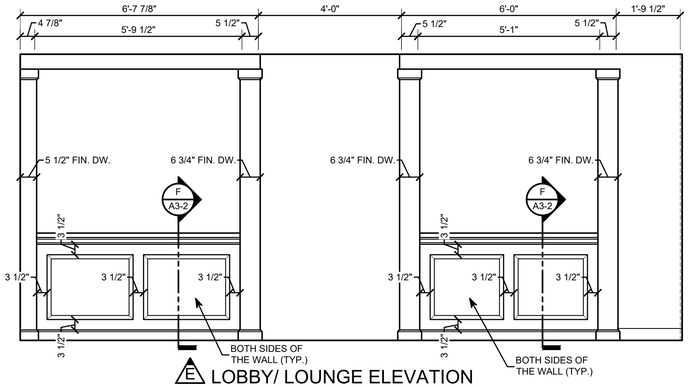

C LAUNDRY RM. ELEVATION

SCALE: 1/2" = 1'-0"



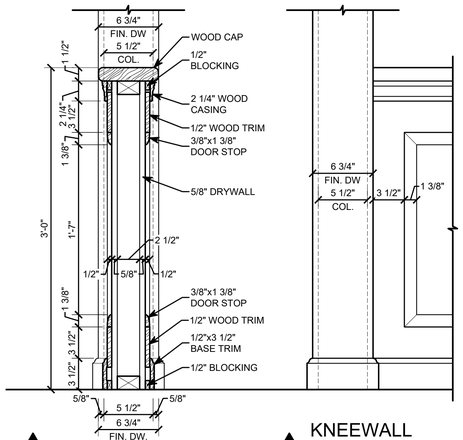

D KITCHENETTE ELEVATION

SCALE: 1/2" = 1'-0"




E LOBBY/ LOUNGE ELEVATION

SCALE: 1/2" = 1'-0"



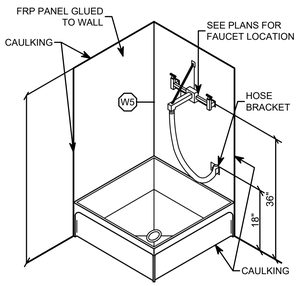

F KNEEWALL SECTION

SCALE: 1 1/2" = 1'-0"



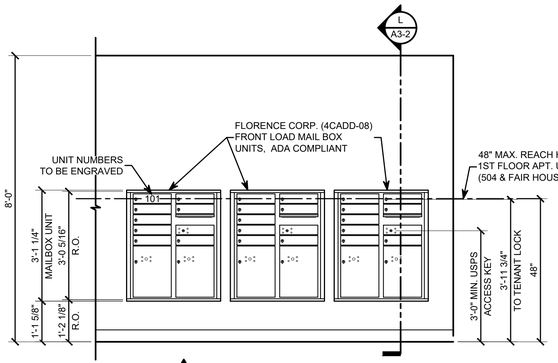

G KNEEWALL DETAIL

SCALE: 1 1/2" = 1'-0"



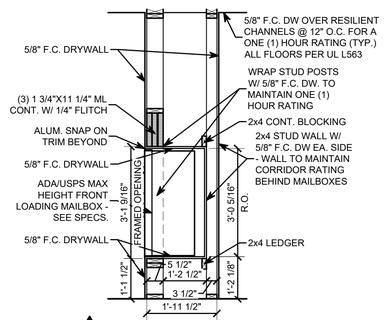

H JANITOR SINK

SCALE: N.T.S.



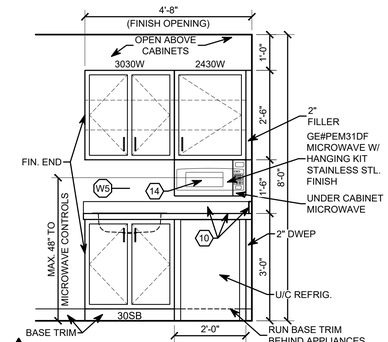

J MAILBOX ELEVATION

SCALE: 1/2" = 1'-0"



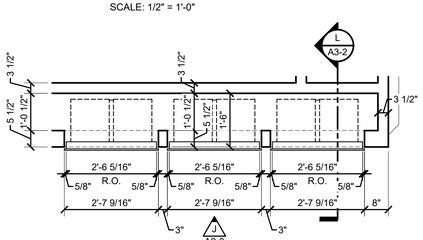

L MAILBOX SECTION

SCALE: 1/2" = 1'-0"




M KITCHENETTE ELEVATION

SCALE: 1/2" = 1'-0"




K MAILBOX PLAN

SCALE: 1/2" = 1'-0"

## CODED NOTES

1. IN LOCATIONS WHERE THE BATHROOMS OR SHOWER ABUTS A FIRE RATED CORRIDOR WALL, UNIT SEPARATION WALL OR EXTERIOR WALL, ONE (1) LAYER OF MOISTURE RESISTANT 5/8" F.C. DRYWALL SHALL BE INSTALLED ON THE RATED WALL & TAPE SEALED & MUDDED ON ROUGH COAT PRIOR TO INSTALLING THE UNIT. AFTER INSTALLATION, A SECOND LAYER OF THE SAME SHALL BE INSTALLED OVER THE FLANGES & FINISHED.
2. CLOSET ROD SHELF, 12" DEEP x FULL LENGTH. MOUNT @ 5'-8" A.F.F. ( @ 4'-0" A.F.F. IN 504 UNITS) TO TOP OF SHELF. PROVIDE INTERMEDIATE BRACES FOR SPANS OVER 3'-6".
3. (1) LAUNDRY SHELF 12" DEEP x FULL LENGTH, MOUNT @ 5'-0" A.F.F. ( @ 4'-0" A.F.F. IN 504 UNITS) TO TOP OF SHELF. PROVIDE INTERMEDIATE BRACES FOR SPANS OVER 3'-6".
4. (4) LINEN OR PANTRY SHELVES 12", 16" OR 20" DEEP x FULL LENGTH, SPACE @ 2'-0", 3'-4", 4'-8" & 5'-8" A.F.F.
5. 24" TOWEL BAR, MOUNT @ 5'-0" A.F.F. ( @ 4'-0" A.F.F. IN 504 UNITS) - TAYMOR BATHWARE - MODEL #04-SN6224 PROVIDE 2x6 WOOD BLOCKING BACKUP.
6. 30" TOWEL BAR, MOUNT @ 5'-0" A.F.F. - TAYMORE BATHWARE - MODEL #04-SN6230 PROVIDE 2x6 WOOD BLOCKING BACKUP.
7. RECESSED MEDICINE CABINET - AMERICAN PRIDE - 16" x 22" - #960M22S - MOUNT @ 5'-6" A.F.F. TO TOP (@ 4'-0" A.F.F. TO CENTER IN 504 UNITS), PROVIDE BLOCKING.
8. TOILET PAPER HOLDER, MOUNT @ 1'-9" A.F.F. TO CENTER LINE. TOILET PAPER HOLDER IN APARTMENT UNIT BATH SHALL BE MOEN P5050. MEN'S & WOMEN'S RESTROOM SHALL HAVE BOBRICK B-2888 SURFACE MOUNTED UNIT.
9. 5 FT. SHOWER ROD - HARNEY MFG. #5146608 CURVED STAINLESS STEEL SHOWER ROD W/ FLANGES - PROVIDE 2x6 WOOD BLOCKING BACKUP.
10. PLASTIC LAMINATE TOP W/ 4" BACKSPLASH &/OR SIDESPLASH WHERE APPLICABLE.
11. 36" GRAB BAR - ASI 3800 TYPE-01 - 1 1/2" x 36" S.S. GRAB BAR & 42" GRAB BAR - ASI 3800 TYPE-01 - 1 1/2" x 42" S.S. GRAB BAR & 18" VERTICAL GRAB BAR - ASI 3800 TYPE-01 - 1 1/2" x 18" S.S. GRAB BAR (504 UNIT) - PROVIDE SNAP FLANGE AND BLOCKING FOR ALL GRAB BARS.
12. GRAB BAR BLOCKING - SEE SHEET FH-1 & AC-1.
13. MICROWAVE RANGE HOOD & RANGE HOOD W/ FIRESTOP UNITS.
14. UNDER CABINET MICROWAVE.
15. PROVIDE PRE-FINISHED PLYWOOD PANELS FOR ALL EXPOSED BACKS / SIDES OF CABINETS.

## APPLIANCE SCHEDULE

REFRIGERATOR (ALL UNITS) - GE GTE17DTNRBB (BLACK), 16.6 CU.FT. ADA & ENERGY STAR COMPLIANT

RANGE (REGULAR UNITS) - GE JBS160DMBB (BLACK), 30" FREE-STANDING SLIDE-IN W/ REAR CONTROLS

DROP-IN RANGE (504 UNITS) - GE JD630DTBB (BLACK), 30" DROP-IN, SELF-CLEANING, CERAMIC COOKTOP, GLASS WINDOW

RANGE HOOD (504 UNITS) - GE JVX5305DJBB (BLACK), ENERGY STAR W/ TWO SPEED 270 CFM VENTING SYSTEM & REMOTE SWITCH - SEE ELECTRICAL. (PROVIDE FIRE STOP EXTINGUISHING UNITS UNDER HOOD) (PROVIDE SWITCHES IN SKIRT BOARD)

OVER-THE-RANGE MICROWAVE (REGULAR UNITS) - GE JVM316ODFBB (BLACK), 1.6 CU.FT., 1,000 WATTS, DUCTED RANGE HOOD (PROVIDE FIRE STOP EXTINGUISHING UNITS UNDER HOOD)

UNDER CABINET MICROWAVE (504 UNITS) - GE GCHK07N1BB (BLACK), (10 1/8" H x 17 1/4" W x 13" D) 0.7 CU.FT. W/ HANGING KIT

DISHWASHER (REGULAR UNITS) - GE GDF510PGRBB (BLACK), 24" WIDE, ENERGY STAR RATED

DISHWASHER (504 UNITS) - GE GDT225SGLBB (BLACK), 24" WIDE, ADA & ENERGY STAR COMPLIANT

UNDER COUNTER REFRIGERATOR - GE GME04GGKBB 19.75"W x 33.875"H x 21.25"D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PROJECT:

TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

INTERIOR ELEVATIONS

DATE: 06/26/2026
REVISED:

GEORGE J. KONTOGIANNIS REGISTERED No. AR00034309 STATE OF INDIANA ARCHITECT

GEORGE J. KONTOGIANNIS, LICENSE #AR00034309
EXPIRATION DATE 12/31/2027


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A3-2


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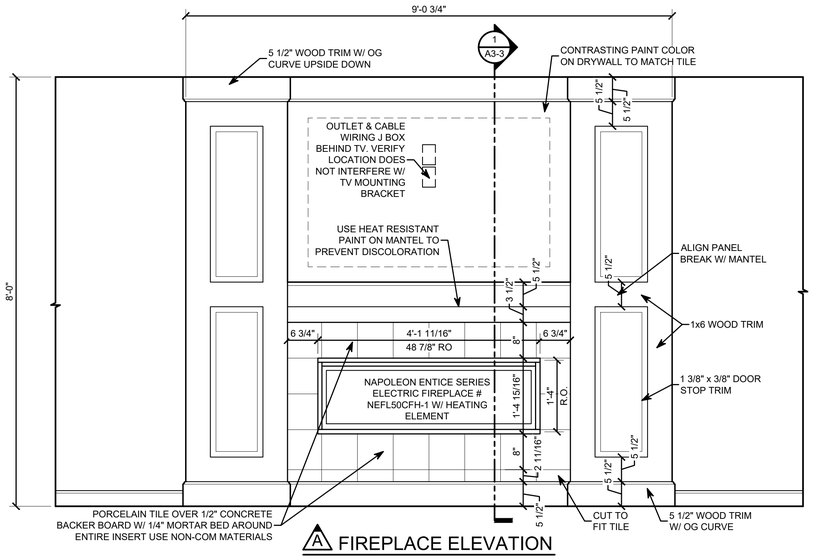
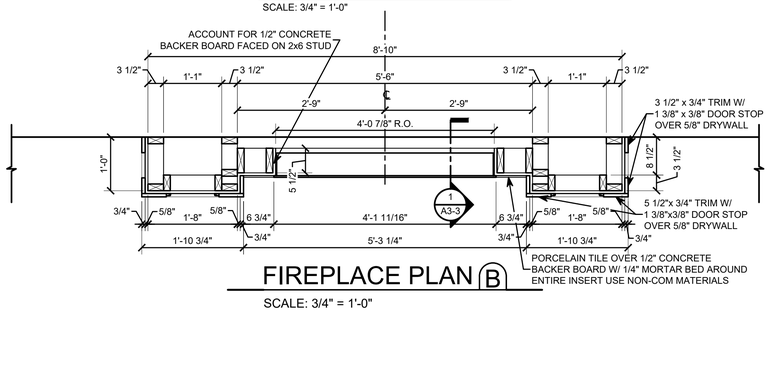


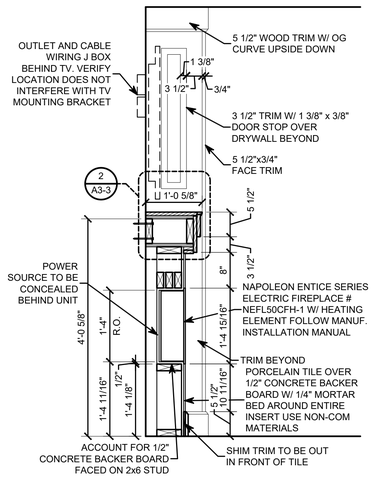

## A FIREPLACE ELEVATION

SCALE: 3/4" = 1'-0"



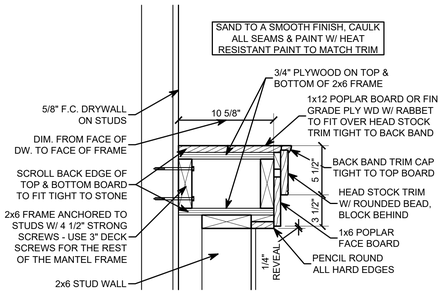

## B FIREPLACE PLAN

SCALE: 3/4" = 1'-0"




## FIREPLACE DETAIL 1

SCALE: 3/4" = 1'-0"




## MANTEL DETAIL 2

SCALE: 1 1/2" = 1'-0"

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UNDER COUNTER REFRIGERATOR - GE GME04GGKBB 19.75"W x 33.875"H x 21.25"D


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PROJECT:

# TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

INTERIOR ELEVATIONS

DATE: 06/26/2026
REVISED:

GEORGE J. KONTOGIANNIS REGISTERED No. AR00034309 STATE OF INDIANA ARCHITECT

GEORGE J. KONTOGIANNIS, LICENSE #AR00034309
EXPIRATION DATE 12/31/2027


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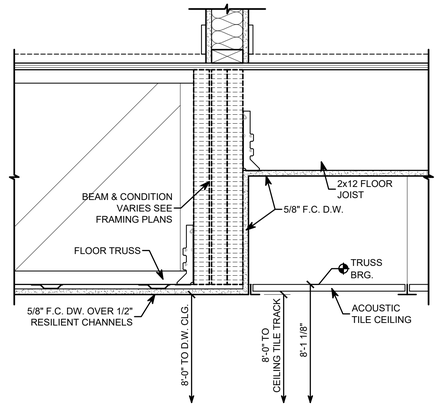


## CEILING DETAIL 1

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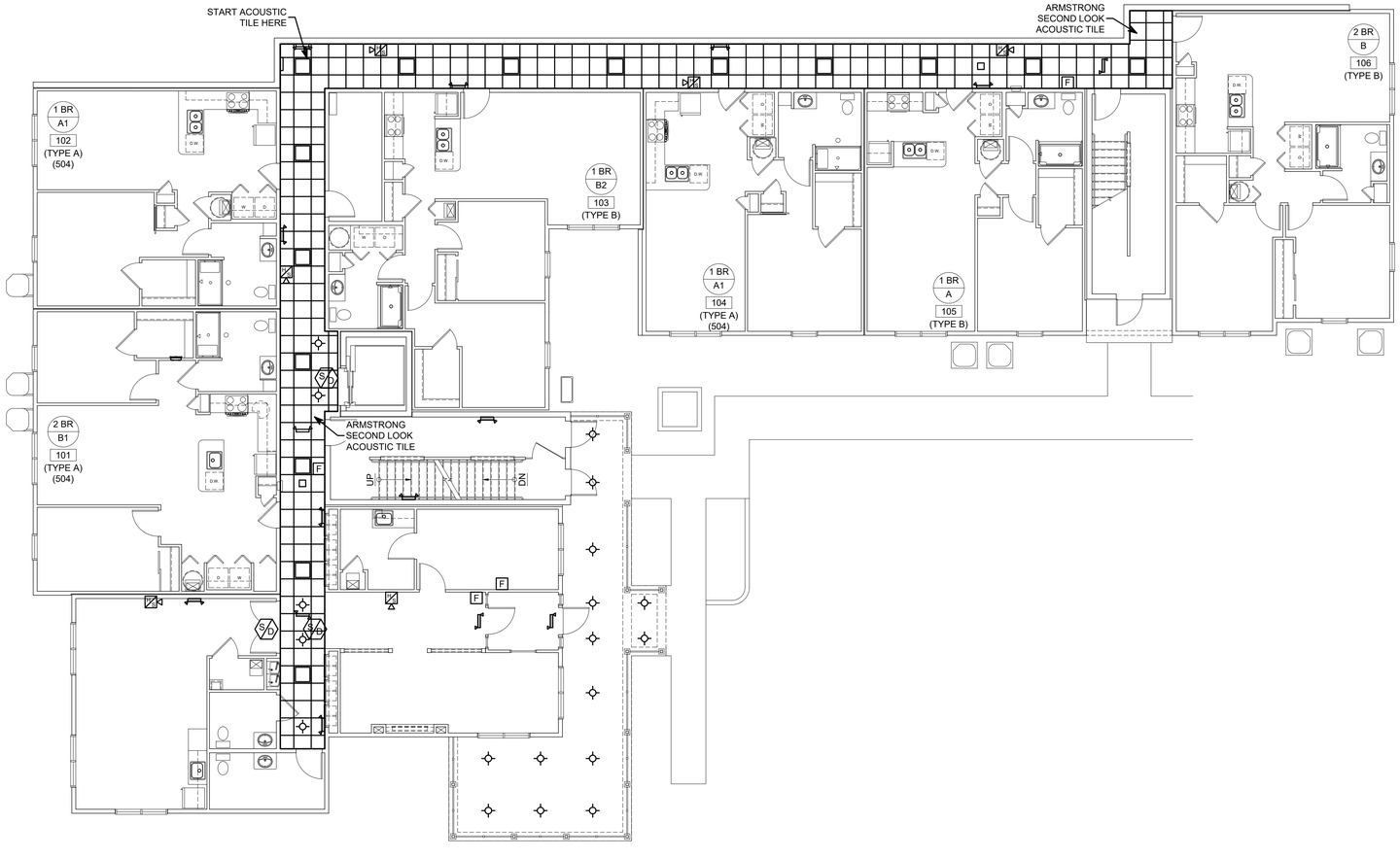
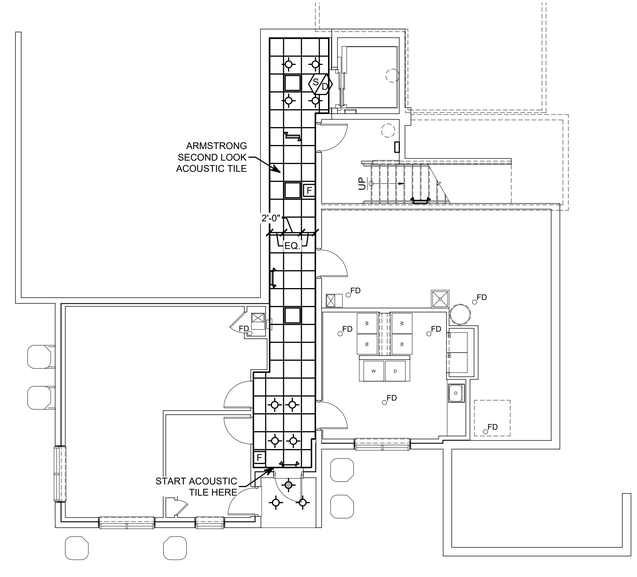



## FIRST FLOOR REFLECTED CEILING PLAN

SCALE: 1/128" = 1'-0"




## GROUND FLOOR REFLECTED CEILING PLAN

SCALE: 1/8" = 1'-0"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PROJECT:

# TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

REFLECTED CEILING PLANS

DATE: 06/26/2026
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**A4-1**


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# WINDOW SCHEDULE

| MARK | SIZE/ NOMINAL | TYPE | MANUF. | MODEL | (W x H) ACTUAL DIMENSION | (W x H) ROUGH OPENING | THICKNESS | LITES | VENT AREA (SQ. FT.) | ELEVATION | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| A | 3050 | SINGLE HUNG | CAPITOL | 3500 | 2'-11 3/4" x 4'-11 3/4" | 3'-0 1/4" x 5'-0 1/4" | | 6/0 | | 1 | ≤ 0.30 U / ≤ 0.40 SHGC EGRESS |
| B | (2) 3050 | SINGLE HUNG | CAPITOL | 3500 | 5'-11 5/8" x 4'-11 3/4" | 6'-0 1/8" x 5'-0 1/4" | | 6/0 | | 2 | ≤ 0.30 U / ≤ 0.40 SHGC MULLED/EGRESS |
| C | 3450 | SINGLE HUNG | CAPITOL | 3500 | 3'-3 1/2" x 4'-11 3/4" | 3'-4" x 5'-0 1/4" | | 8/0 | | 3 | ≤ 0.30 U / ≤ 0.40 SHGC EGRESS |
| | | | | | | | | | | | |
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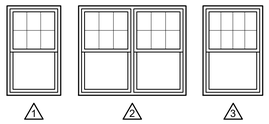
| | | | | | | | | | | | |

*GENERAL NOTE:
1. ALL ENERGY STAR PRODUCTS TO CONTAIN A LABEL. THE LABEL SHALL REMAIN IN PLACE UNTIL FINIAL INSPECTION
2. PROVIDE WINDOW CONTROLS (SAFETY LATCH) ON ALL 2ND, 3RD & 4TH FLOOR WINDOWS




# FINISH SCHEDULE

| NO. | NAME | FLOOR | BASE | WALL | CLG. | CLG. HT. | REMARKS |
|---|---|---|---|---|---|---|---|
| | COMMON AREAS | | | | | | |
| 001 | STAIR #1 | F-3 / F-6 | B-4 | W-1 | C-1 | (VARIES) | |
| 002 | ELEV. LOBBY (GROUND FL) | F-4 | B-2 | W-1 | C-3 | 8'-0" | |
| 003 | CORRIDOR (GROUND FL) | F-8 | B-2 | W-1 | C-3 | 8'-0" | |
| 004 | MECHANICAL / STORAGE | F-5 | B-1 | W-1 | C-1 | 8'-0" | |
| 005 | EXERCISE ROOM | F-8 | B-2 | W-1 | C-1 | 8'-0" | |
| 006 | SOCIAL SERVICES | F-1 | B-2 | W-1 | C-1 | 8'-0" | |
| 007 | LAUNDRY | F-3 | B-1 | W-1 | C-1 | 8'-0" | |
| 008 | VESTIBULE | F-7 | B-3 | W-1 | C-1 | 8'-0" | INLAY @ ENTRY |
| 009 | ENTRY | F-7 | B-3 | W-1 | C-1 | 8'-0" | INLAY @ ENTRY |
| 010 | LOUNGE | F-4 | B-2 | W-1 | C-3 | 8'-0" | |
| 011 | WOMEN'S | F-3 | B-1 | W-1 | C-1 | 8'-0" | |
| 012 | MEN'S | F-3 | B-1 | W-1 | C-1 | 8'-0" | |
| 013 | COMMUNITY ROOM | F-5 | B-1 | W-1 | C-1 | 8'-0" | |
| 014 | MECHANICAL | F-5 | B-1 | W-1 | C-1 | 8'-0" | |
| 015 | OFFICE STORAGE | F-3 | B-2 | W-1 | C-1 | 8'-0" | |
| 016 | OFFICE | F-1 | B-2 | W-1 | C-1 | 8'-0" | |
| 017 | ELEV. LOBBY (1ST FL) | F-4 | B-2 | W-1 | C-3 | 8'-0" | |
| 018 | CORRIDOR (1ST FL) | F-8 | B-2 | W-1 | C-1 | 8'-0" | |
| 019 | MECHANICAL | F-5 | B-1 | W-1 | C-1 | 8'-0" | |
| 020 | CORRIDOR (1ST FL) | F-8 | B-2 | W-1 | C-1 | 8'-0" | |
| 021 | STAIR #2 | F-3 / F-6 | B-4 | W-1 | C-1 | (VARIES) | |
| 022 | CORRIDOR (2ND FL) | F-8 | B-2 | W-1 | C-1 | 8'-0" | |
| 023 | MECHANICAL | F-5 | B-1 | W-1 | C-1 | 8'-0" | |
| 024 | CORRIDOR (2ND FL) | F-8 | B-2 | W-1 | C-1 | 8'-0" | |
| 025 | ELEV. LOBBY (2ND FL) | F-4 | B-2 | W-1 | C-3 | 8'-0" | |
| 026 | CORRIDOR (3RD FL) | F-8 | B-2 | W-1 | C-1 | 8'-0" | |
| 027 | MECHANICAL | F-5 | B-1 | W-1 | C-1 | 8'-0" | |
| 028 | CORRIDOR (3RD FL) | F-8 | B-2 | W-1 | C-1 | 8'-0" | |
| 029 | ELEV. LOBBY (3RD FL) | F-4 | B-2 | W-1 | C-3 | 8'-0" | |
| 030 | CORRIDOR (4TH FL) | F-8 | B-2 | W-1 | C-1 | 8'-0" | |
| 031 | MECHANICAL | F-5 | B-1 | W-1 | C-1 | 8'-0" | |
| 032 | CORRIDOR (4TH FL) | F-8 | B-2 | W-1 | C-1 | 8'-0" | |
| 033 | ELEV. LOBBY (4TH FL) | F-4 | B-2 | W-1 | C-3 | 8'-0" | |
| | | | | | | | |

| NAME | FLOOR | BASE | WALL | CLG. | CLG. HT. | REMARKS |
|---|---|---|---|---|---|---|
| TYPICAL UNITS | | | | | | |
| LIVING | F-4 | B-2 | W-1 | C-1 | 8'-0" | |
| DINING | F-4 | B-2 | W-1 | C-1 | 8'-0" | |
| KITCHEN | F-4 | B-1 | W-1 | C-1 | 8'-0" | |
| LAUNDRY | F-4 | B-1 | W-1 | C-1 | 8'-0" | |
| PANTRY | F-4 | B-1 | W-1 | C-1 | 8'-0" | |
| BATH | F-2 | B-1 | W-1 | C-1 | 8'-0" | |
| BEDROOM | F-1 | B-2 | W-1 | C-1 | 8'-0" | |
| CLOSETS / COAT | F-1 / F-4 | B-2 | W-1 | C-1 | 8'-0" | |
| LINEN | F-2 | B-1 | W-1 | C-1 | 8'-0" | |
| MECHANICAL | F-3 | B-1 | W-1 | C-1 | 8'-0" | |
| HALL | F-4 | B-1 | W-1 | C-1 | 8'-0" | |

## FLOOR FINISHES

| SYM. | MATERIAL | SPECIFICATION |
|---|---|---|
| F-1 | CARPET | MOHAWK PROPERTIES COLLECTION, NEUTRAL SHIFT, SMARTSTRAND NANOLOC |
| F-2 | SHEET VINYL | TARKETT, FIBER FLOOR CUSTSOM PRO. |
| F-3 | 12 x 12 VCT | ARMSTRONG FLOORING, STANDARD EXCELON IMPERIAL TEXTURE |
| F-4 | VINYL PLANK - LVP | MOHAWK, PORTICO COLLECTION, 12 MIL. |
| F-5 | EXPOSED CONCRETE | |
| F-6 | VINYL STAIR TREADS & RISERS | ROPPE, HEAVY DUTY, ROUND NOSE |
| F-7 | QUARRY/CERAMIC TILE | 8x8 MIN. COEFFICIENT ≥ 0.6 DALTILE, QUARY TILE |
| F-8 | CARPET TILE | J&J FLOORING, MINERAL MODULAR 22oz. |

## BASE FINISHES

| SYM. | MATERIAL | SPECIFICATION |
|---|---|---|
| B-1 | 4" VINYL BASE | 1/8" COVED |
| B-2 | PRIMED WOOD | PAINTED SEMI-GLOSS |
| B-3 | 4" TILE BASE | 4x8 BULL NOSE TILE BASE |
| B-4 | 4" VINYL BASE | ROPPE, WALL BASE |

## WALL FINISHES

| SYM. | MATERIAL | SPECIFICATION |
|---|---|---|
| W-1 | DRYWALL | PAINTED EGGSHELL |

## CEILING FINISHES

| SYM. | MATERIAL | SPECIFICATION |
|---|---|---|
| C-1 | DRYWALL | TEXTURED - KNOCK DOWN |
| C-2 | DRYWALL | PAINTED SMOOTH |
| C-3 | 2x2 ACOUSTIC TILE | SECOND - LOOK TILE |

# DOOR SCHEDULE

| MARK | DOOR TYPE | WIDTH | HEIGHT | THICKNESS | CORE MATERIAL | FINISH | DOOR GLAZING | FIRE RATING | FRAME MATERIAL | FRAME SIZE | SEE DETAILS ON SHEET: HEAD | JAMB | SILL | ELEVATION | REMARKS | HARDWARE: HINGES | LOCKSET | PANIC | CLOSER | THRESHOLD | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 4 PANEL METAL CLAD | 3'-0" | 6'-8" | 1 3/4" | METAL CLAD | PRIME | | 20 MIN | REDI-FLEX | | | | | A | | 1 1/2 PR 4 1/2" x 4 1/2" 1279RC | AL10S (NEPTUNE) B560P W/ 1" THROW | | SPRING HINGES | ADA THRESHOLD | 1 2 |
| 2 | 4 PANEL WOOD | 2'-10" | 6'-8" | 1 3/8" | HC | PRIME | | | WD | 4 13/16" | | | | B | UNDERCUT 1" | 1 1/2 PR 4"x4" 1279RC | F40S (SATURN) | | | | 1 |
| 3 | PANEL WOOD | 1'-6" | 6'-8" | 1 3/8" | HC | PRIME | | | WD | 4 13/16" | | | | J | | 1 1/2 PR 4"x4" 1279RC | F10S | | | | 1 |
| 4 | 4 PANEL WOOD | 2'-10" | 6'-8" | 1 3/8" | HC | PRIME | | | WD | 4 13/16" | | | | B | | 1 1/2 PR 4"x4" 1279RC | F10S | | | | 1 |
| 5 | LOUVERED (BI-FOLD) | (2) 1'-3" | 7'-10" | 1 3/8" | HC | PRIME | | | DW | | | | | C | | | | | | | 9 |
| 6 | WOOD PANELED (BI-FOLD) | (4) 1'-3" | 6'-8" | 1 3/8" | HC | PRIME | | | DW | | | | | D | | | | | | | 9 |
| 7 | 4 PANEL HOLLOW METAL | 3'-0" | 6'-8" | 1 3/4" | HM | PRIME | | 1 1/2 HR | REDI-FLEX | | | | | E | | 1 1/2 PR 4 1/2" x 4 1/2" 1279RC | AL10Sx2 3/4" | | ADA 7600 | ADA THRESHOLD | 4 |
| 8 | INSULATED METAL CLAD FRENCH DOOR | 3'-0" | 6'-8" | 1 3/4" | INSUL MTL CLAD | PRIME | INSUL TEMP | | KDHM | | | | | F | | 1 1/2 PR 4 1/2" x 4 1/2" 1279RC | | RIM PANIC W/ LEVER | ADA 7600 | ADA THRESHOLD | 4 7 |
| 9 | 4 PANEL WOOD | 2'-0" | 6'-8" | 1 3/8" | HC | PRIME | | | WD | | | | | B | | 1 1/2 PR 4"x4" | F10S | | | | 1 |
| 10 | 4 PANEL WOOD (BI-PASS) | (2) 2'-6" | 6'-8" | 1 3/8" | HC | PRIME | | | DW | | | | | G | | | | | | | 3 |
| 11 | 4 PANEL INSULATED METAL CLAD | 3'-0" | 6'-8" | 1 3/4" | HM | PRIME | | 3/4 HR | REDI-FLEX | | | | | K | | 1 1/2 PR 4 1/2" x 4 1/2" 1279 | AL10Sx2 3/4" | | ADA 7600 | ADA THRESHOLD | 4 |
| 12 | 4 PANEL WOOD | 3'-0" | 6'-8" | 1 3/8" | HC | PRIME | | | WD | | | | | B | UNDERCUT 1" | 1 1/2 PR 4" x 4" 1279 | F40S | | | | 1 |
| 13 | 4 PANEL WOOD | 3'-0" | 6'-8" | 1 3/8" | HC | PRIME | | | WD | | | | | B | | 1 1/2 PR 4" x 4" 1279 | F10S | | | | 1 |
| 14 | 4 PANEL WOOD (BI-PASS) | (2) 3'-0" | 6'-8" | 1 3/8" | HC | PRIME | | | DW | | | | | G | | | | | | | 3 |
| 15 | 4 PANEL METAL CLAD | 3'-0" | 6'-8" | 1 3/4" | METAL CLAD | PRIME | | 3/4 HR | REDI-FLEX | | | | | K | | 1 1/2 PR 4 1/2" x 4 1/2" 1279 | AL40Sx2 3/4" | | ADA 7600 | ADA THRESHOLD | 4 |
| 16 | 4 PANEL METAL CLAD | 3'-0" | 6'-8" | 1 3/4" | METAL CLAD | PRIME | | 1 1/2 HR | KDHM | | | | | M | | 1 1/2 PR 4 1/2" x 4 1/2" 1279 | AL10Sx2 3/4" | | ADA 7600 | ADA THRESHOLD | 4 |
| 17 | 4 PANEL METAL CLAD | 3'-0" | 6'-8" | 1 3/4" | INSUL HM | PRIME | | | REDI-FLEX | | | | | K | | 1 1/2 PR 4 1/2" x 4 1/2" 1279 | AL53PDx2 3/4" | | | | 1 |
| 18 | 4 PANEL METAL CLAD | 3'-0" | 6'-8" | 1 3/4" | INSUL HM | PRIME | | 3/4 HR | PFHM | | | | | K | | 1 1/2 PR 4 1/2" x 4 1/2" 1279 | AL53PDx2 3/4" | | ADA 7600 | ADA THRESHOLD | 1 |
| 19 | INSULATED METAL CLAD FRENCH DOOR | 3'-0" | 6'-8" | 1 3/4" | INSUL MTL CLAD | PRIME | INSUL TEMP | | REDI-FLEX | | | | | P | 0.32 U / 0.40 OR LESS SHGC | 1 1/2 PR 4 1/2" x 4 1/2" 1279 | | | ADA DOOR OPENER | ADA THRESHOLD | 5 7 10 |
| 20 | INSULATED METAL CLAD FRENCH DOOR | 3'-0" | 6'-8" | 1 3/4" | INSUL MTL CLAD | PRIME | INSUL TEMP | | REDI-FLEX | | | | | P | 0.32 U / 0.40 OR LESS SHGC | 1 1/2 PR 4 1/2" x 4 1/2" 1279 | | RIM PANIC W/ LEVER | ADA DOOR OPENER | ADA THRESHOLD | 7 10 11 |
| 21 | 4 PANEL WOOD | 2'-4" | 6'-8" | 1 3/8" | HC | PRIME | | | WD | | | | | B | | 1 1/2 PR 4"x4" 1279RC | F10S | | | | |
| 22 | 4 PANEL INSULATED METAL CLAD | 3'-0" | 6'-8" | 1 3/4" | INSUL MTL CLAD | PRIME | | | KDHM | | | | | M | | 1 1/2 PR 4 1/2" x 4 1/2" 1279 | AL53PDx2 3/4" | | | | |
| 23 | INSULATED FULL GLASS METAL CLAD SIDELIGHT(FIXED) | 1'-2" | 6'-8" | 1 3/4" | INSUL MTL CLAD | PRIME | INSUL TEMP | | REDI-FLEX | | | | | L | FIXED SIDELIGHT 0.32 U / 0.40 OR LESS SHGC | | | | | | 7 |
| 24 | INSULATED METAL CLAD FRENCH DOOR | 3'-0" | 6'-8" | 1 3/4" | INSUL MTL CLAD | PRIME | INSUL TEMP | | KDHM | | | | | R | 0.32 U / 0.40 OR LESS SHGC W/ SIDELIGHT | 1 1/2 PR 4 1/2" x 4 1/2" 1279 | AL50PDx2 3/4" | | ADA 7600 | ADA THRESHOLD | 4 7 12 |
| 25 | WOOD PANEL BI-FOLD | (4) 1'-3" | 6'-8" | 1 3/8" | HC | PRIME | | | DW | | | | | S | | | | | | | 9 |
| 26 | WOOD PANEL BI-FOLD | (2) 1'-3" | 7'-10" | 1 3/8" | HC | PRIME | | | DW | | | | | H | | | | | | | 9 |
| 27 | 4 PANEL INSULATED METAL CLAD | (2) 3'-0" | 6'-8" | 1 3/4" | INSUL MTL CLAD | PRIME | | 3/4 HR | REDI-FLEX | | | | | N | | 1 1/2 PR 4 1/2" x 4 1/2" 1279 | AL53PDx2 3/4" | | | | |
| 28 | 4 PANEL METAL CLAD | 3'-0" | 6'-8" | 1 3/4" | METAL CLAD | PRIME | | 3/4 HR | KDHM | | | | | M | | 1 1/2 PR 4 1/2" x 4 1/2" 1279RC | AL10Sx2 3/4" | | ADA 7600 | ADA THRESHOLD | 4 |
| 29 | 4 PANEL METAL CLAD | 3'-0" | 6'-8" | 1 3/4" | METAL CLAD | PRIME | | 3/4 HR | KDHM | | | | | M | | 1 1/2 PR 4 1/2" x 4 1/2" 1279RC | AL53PDx2 3/4" | | ADA 7600 | ADA THRESHOLD | 4 |
| 30 | 4 PANEL WOOD | 2'-8" | 6'-8" | 1 3/8" | HC | PRIME | | | WD | | | | | B | | 1 1/2 PR 4" x 4" | F10S | | | | 1 |
| 31 | 4 PANEL WOOD | 2'-6" | 7'-10" | 1 3/8" | HC | PRIME | | | WD | | | | | T | | 1 1/2 PR 4" x 4" | F10S | | | | 1 |

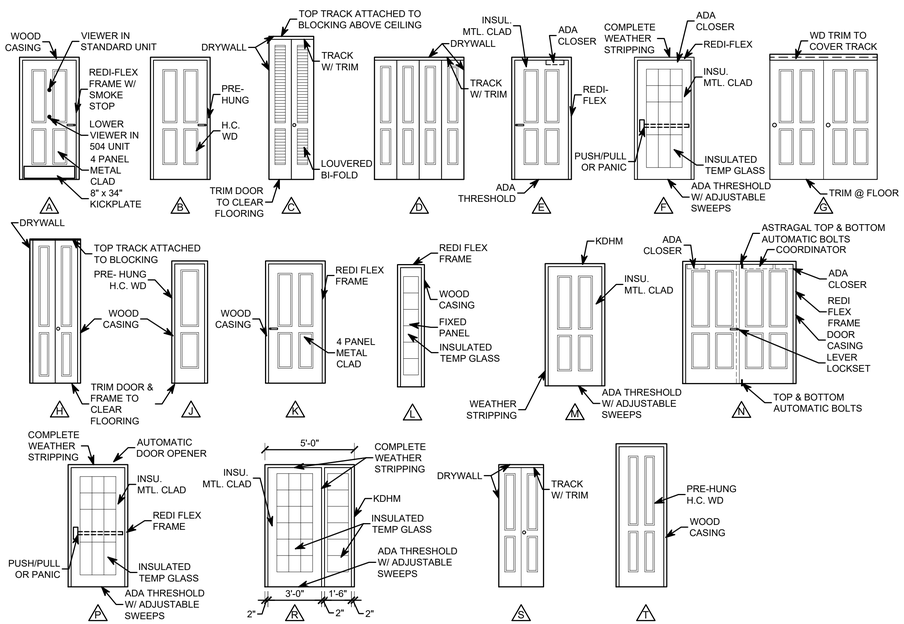
*GENERAL NOTE:
1. ALL ENERGY STAR PRODUCTS TO CONTAIN A LABEL. THE LABEL SHALL REMAIN IN PLACE UNTIL FINIAL INSPECTION
2. ALL INTERIOR DOORS SHALL RECEIVE ONE COAT OF PRIMER & TWO COATS OF SATIN FINISH TO INCLUDE ALL SIX SIDES.
3. ALL HANDELS, PULLS ETC. SHALL BE LEVER HANDEL. UNITS ON ACCESSIBLE DOORS SHALL NOT REQUIRE TIGHT GRASPING, PINICHING, OR TWISTING.

## HARDWARE CODED NOTES

1. SPRING TYPE WALL STOP
2. KNOCKER/VIEWER. SECOND LOWER VIEWER IN HAND. UNITS
3. MANUFACTURER TOP TRACK W/ ROLLER BRACKETS & 2 1/8" FINGER PULLS (US26D)
4. MOUNT CLOSER ON ROOM SIDE OF DOOR
5. PUSH/PULL PLATES
6. TOP & BOTTOM BOLTS ON INACTIVE LEAF - HEAD MOUNTED COORDINATOR
7. COMPLETE WEATHERSTRIPPING PACKAGE
8. FIRE ALARM DOOR HOLD OPEN
9. COMPLETE TRACK & HARDWARE PACKAGE BY MANUFACTURER PROVIDE MINIMUM 1 1/2" US2D PULLS
10. STANLEY ADA DOOR OPENER/CLOSER
11. ELECTRIC STRIKE CONTROLLED BY INTERCOM
12. ELECTRIC STRIKE CONTROLLED BY KEY FOB

## ABBREVIATIONS

- H.C. - HOLLOW CORE
- S.C. - SOLID CORE
- PF - PRE-FINISHED WOOD DOOR - COLOR BY ARCHITECT FROM MFR. SAMPLES
- PL - PLASTIC LAMINATE FACED SOLID CORE WOOD DOOR - COLOR BY ARCHITECT FROM MFR. SAMPLES
- PTD. - PRIME PAINTED - FINISH COAT BY PAINTER
- HM - HOLLOW METAL
- KDHM - KNOCK DOWN HOLLOW METAL
- REDI-FLEX - PREFINISHED HOLLOW METAL FRAME- 2 PIECE W/ WOOD CASING
- INSUL. - INSULATED
- TEMP. - TEMPERED OR LAMINATED APPROVED SAFETY GLASS A REQUIRED BY CODE





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PROJECT:

TANNER'S CREEK MANOR


58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025


DRAWING TITLE:

DOOR, WINDOW & FINISH SCHEDULES

DATE: 06/26/2026
REVISED:

GEORGE J. KONTOGIANNIS REGISTERED No. AR00034309 STATE OF INDIANA ARCHITECT

GEORGE J. KONTOGIANNIS, LICENSE #AR00034309
EXPIRATION DATE 12/31/2027


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- ☐ CONSTRUCTION SET

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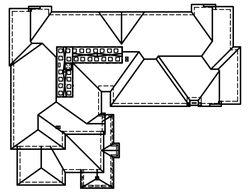
## EXTERIOR ELEVATION GENERAL NOTES:

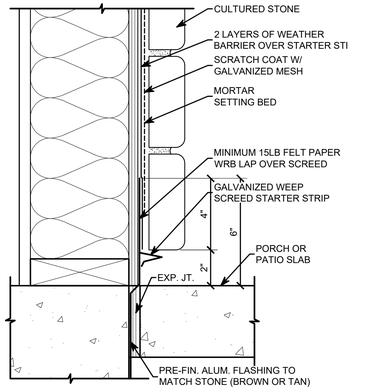
1. ALL EXTERIOR MATERIALS ARE TO WRAP CORNERS AND TERMINATE BACK AT INSIDE CORNERS.
2. SEE ROOF PLAN FOR CONTINUOUS RIDGE VENT LENGTHS & ROOF POT LOCATIONS.
3. ALL VINYL LAP SIDING TO BE 5" DOUBLE LAP.
4. ALL VINYL OUTSIDE CORNERS TO BE A VINYL ONE-PIECE BEADED CORNER POST, FORMING 5" CORNERS.
5. ALL VINYL INSIDE CORNERS TO BE 5" LINEAR VINYL TRIM.
6. ALL WINDOWS IN VINYL TO BE TRIMMED WITH 5" LINEAR VINYL TRIM.
7. HOLD STUCCO STONE 2" OFF CONCRETE (SEE DETAIL 1/A6-1) & ROOF SHINGLES.
8. INSTALL ALL FLASHING PER THE MANUFACTURES SPECIFICATIONS / VINYL SIDING INSTITUTE GUIDELINES & STUCCO STONE INSTALLATION INSTRUCTIONS.



KEY PLAN

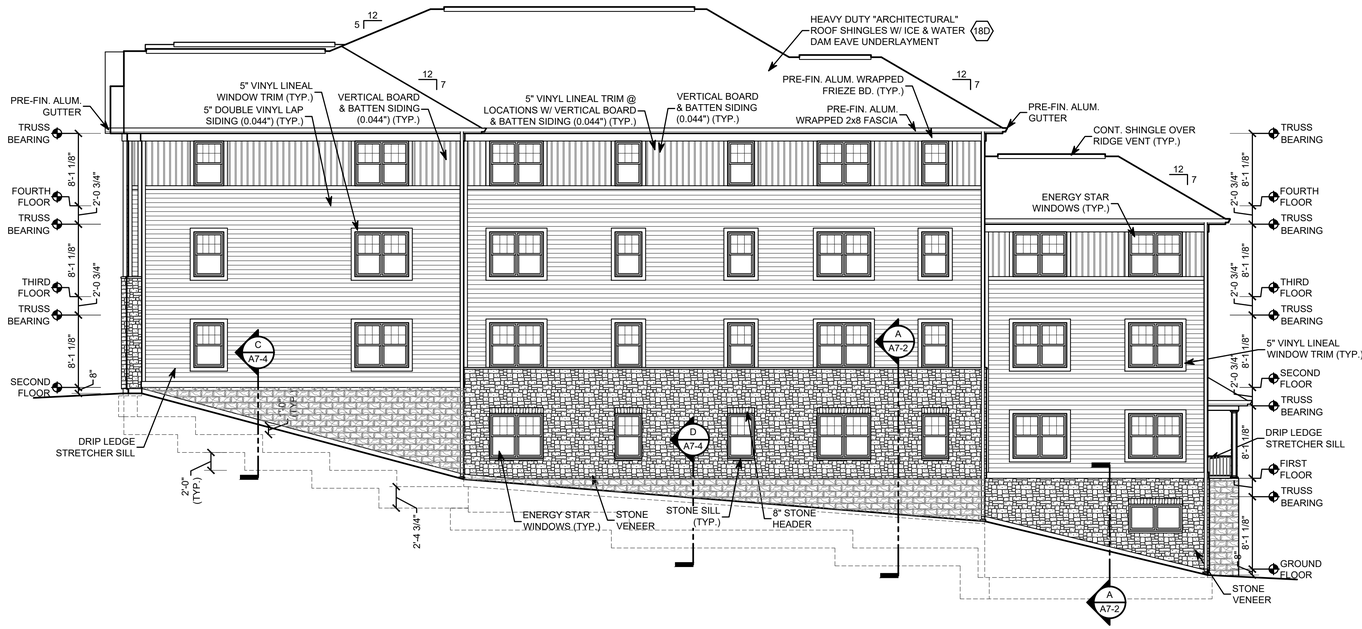
SCALE: N.T.S.

NORTH




## STUCCO STONE DETAIL 1

SCALE: 1/128" = 1'-0"

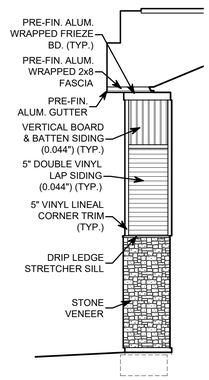



## RIGHT END ELEVATION B

SCALE: 1/8" = 1'-0"

## EXTERIOR ELEVATION GENERAL NOTES:

| MATERIAL | COLOR |
|---|---|
| ROOF SHINGLES: | WEATHERED WOOD |
| PRE-FINISHED ALUM. WRAPPED FASCIA & FRIEZE: | WHITE |
| PRE-FINISHED ALUM. GUTTERS & DOWNSPOUTS: | WHITE |
| PRE-FINISHED ALUM. RAILINGS & COLUMNS: | WHITE |
| VERTICAL BOARD & BATTEN: | |
| VINYL LAP SIDING: | |
| 5" VINYL LINEAL TRIM & 5" VINYL INSIDE & OUTSIDE CORNERS: | WHITE |
| STUCCO STONE, SILL & HEADER: | |
| WINDOWS: | WHITE |




## PARTIAL ELEVATION C

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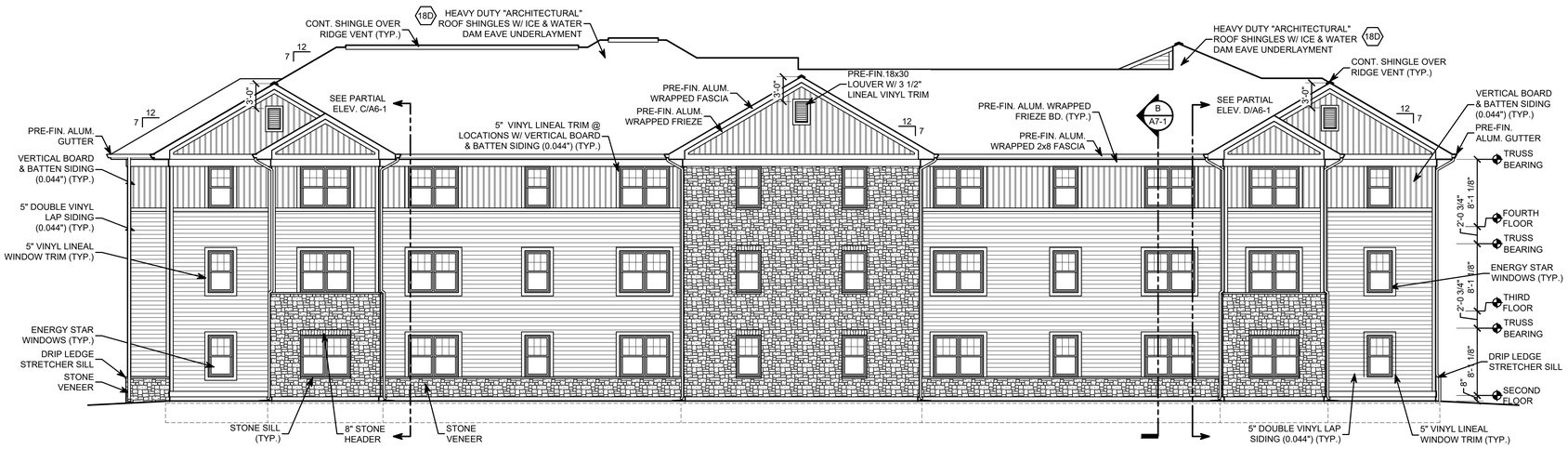


## FRONT ELEVATION A

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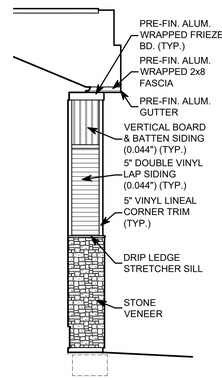


## PARTIAL ELEVATION D

SCALE: 1/8" = 1'-0"


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PROJECT:

# TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

EXTERIOR ELEVATIONS

DATE: 06/26/2026
REVISED:

GEORGE J. KONTOGIANNIS REGISTERED No. AR00034309 STATE OF INDIANA ARCHITECT

GEORGE J. KONTOGIANNIS, LICENSE #AR00034309
EXPIRATION DATE 12/31/2027


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## EXTERIOR ELEVATION GENERAL NOTES:

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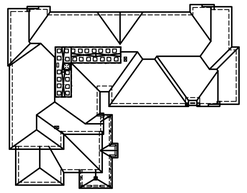
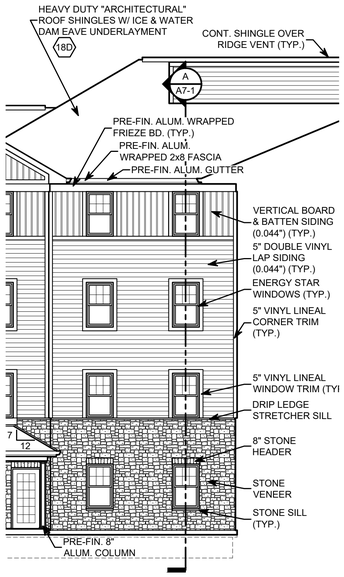


## KEY PLAN

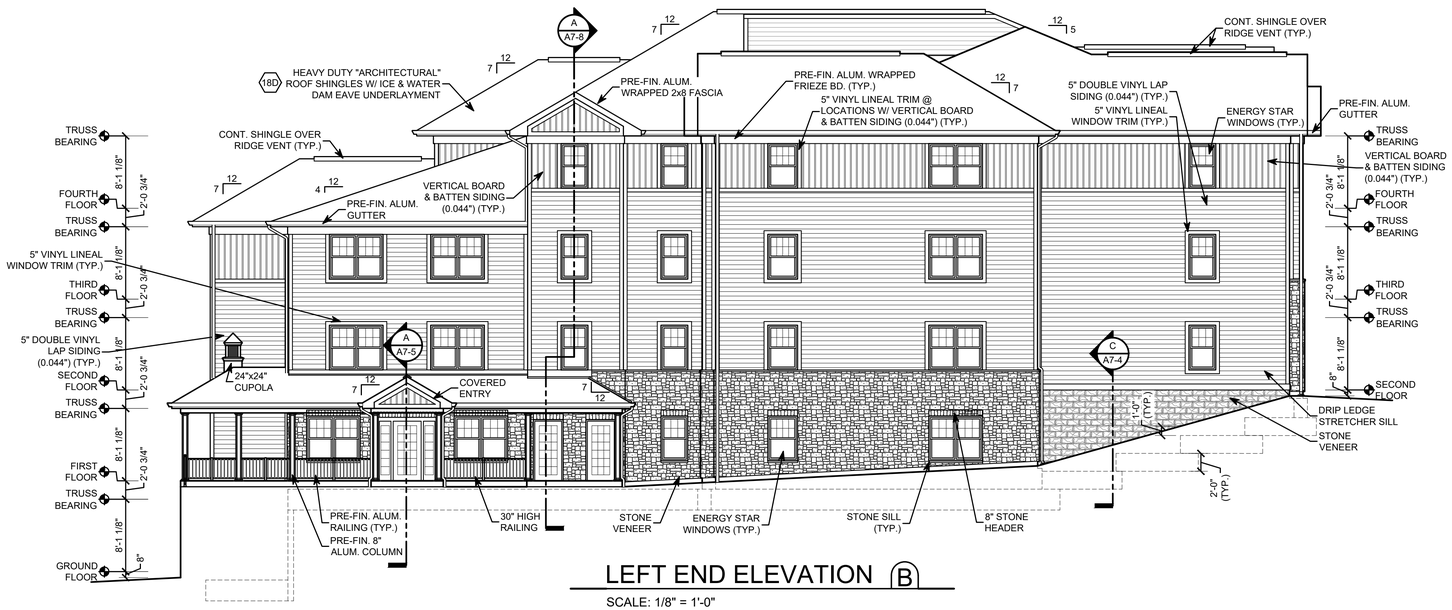
SCALE: N.T.S.

NORTH



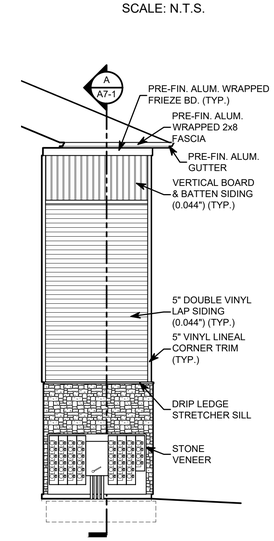

## PARTIAL ELEVATION C

SCALE: 1/8" = 1'-0"



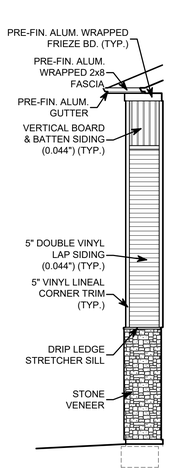

## LEFT END ELEVATION B

SCALE: 1/8" = 1'-0"



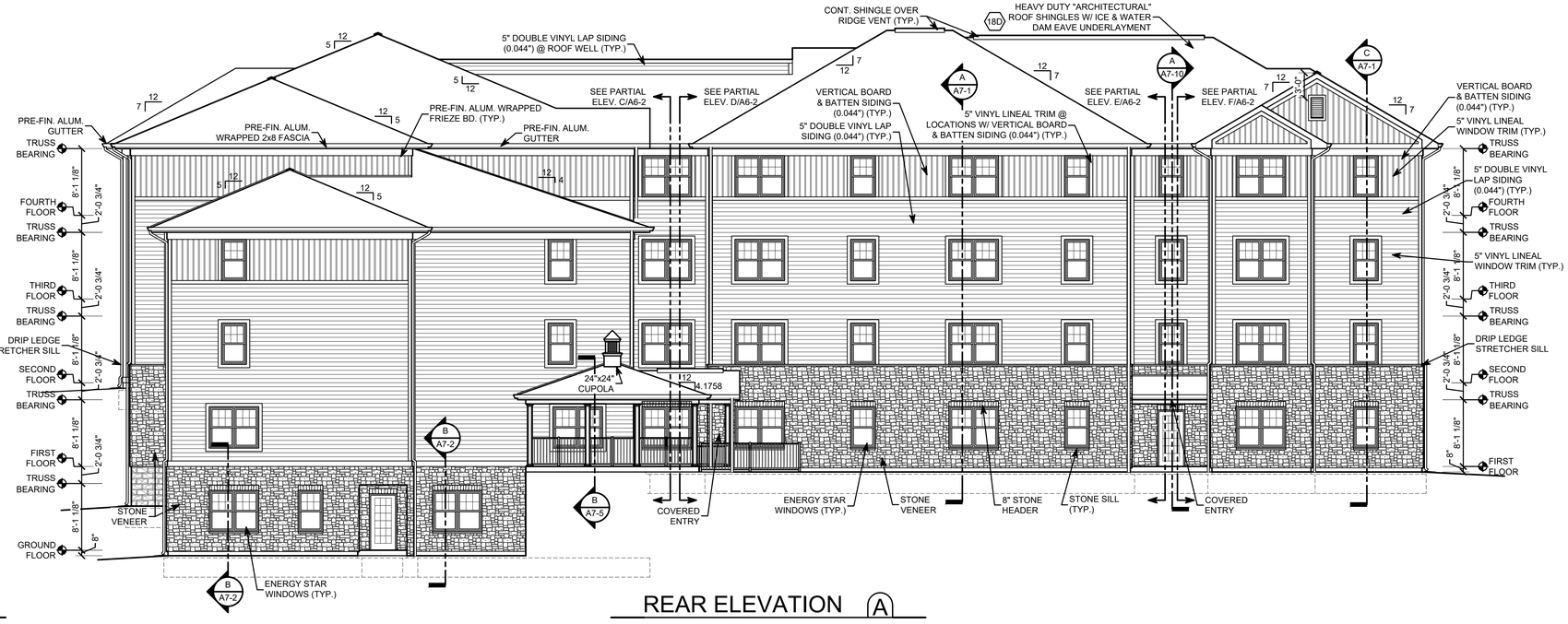

## PARTIAL ELEVATION D

SCALE: 1/8" = 1'-0"



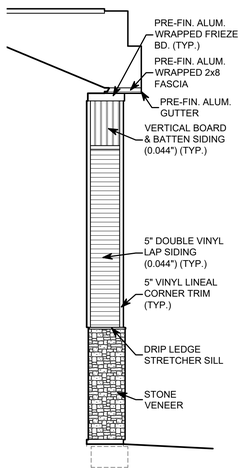

## PARTIAL ELEVATION E

SCALE: 1/8" = 1'-0"




## REAR ELEVATION A

SCALE: 1/8" = 1'-0"




## PARTIAL ELEVATION F

SCALE: 1/8" = 1'-0"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PROJECT:

# TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

## EXTERIOR ELEVATIONS

DATE: 06/26/2026
REVISED:

GEORGE J. KONTOGIANNIS REGISTERED No. AR00034309 STATE OF INDIANA ARCHITECT

GEORGE J. KONTOGIANNIS, LICENSE #AR00034309
EXPIRATION DATE 12/31/2027


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**A6-2**


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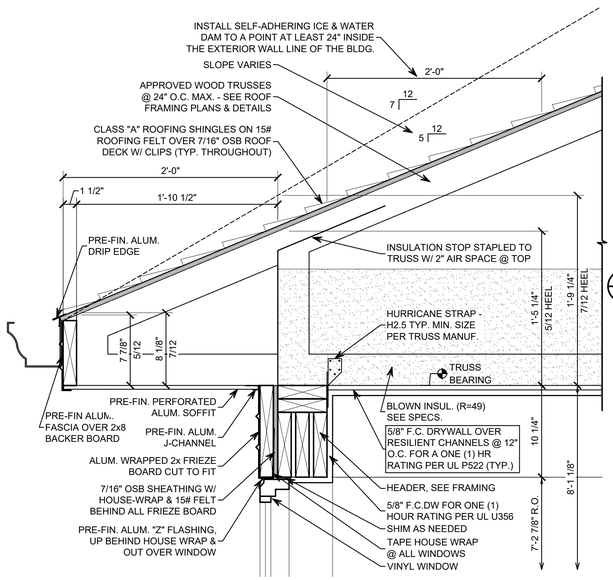
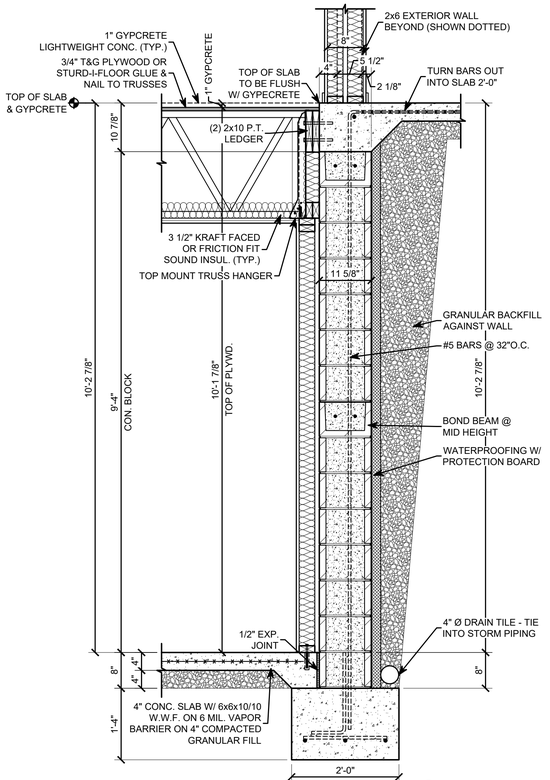


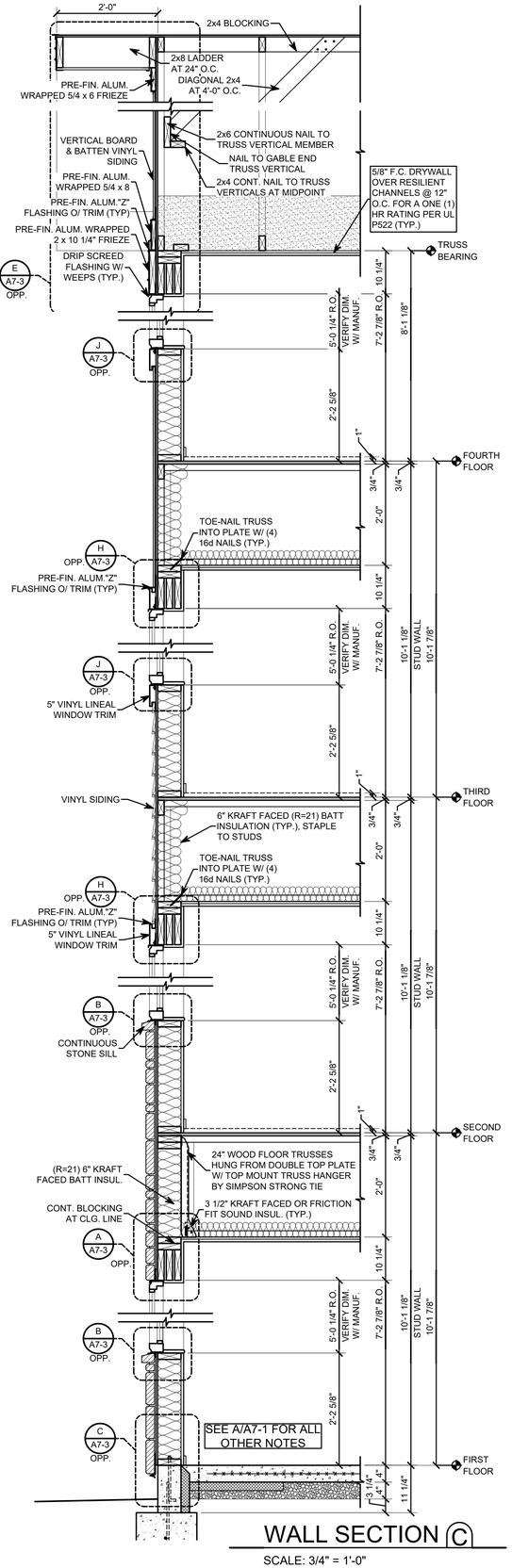

## TYPICAL OVERHANG DETAIL 1

SCALE: 1 1/2" = 1'-0"




## WALL SECTION E

SCALE: 3/4" = 1'-0"

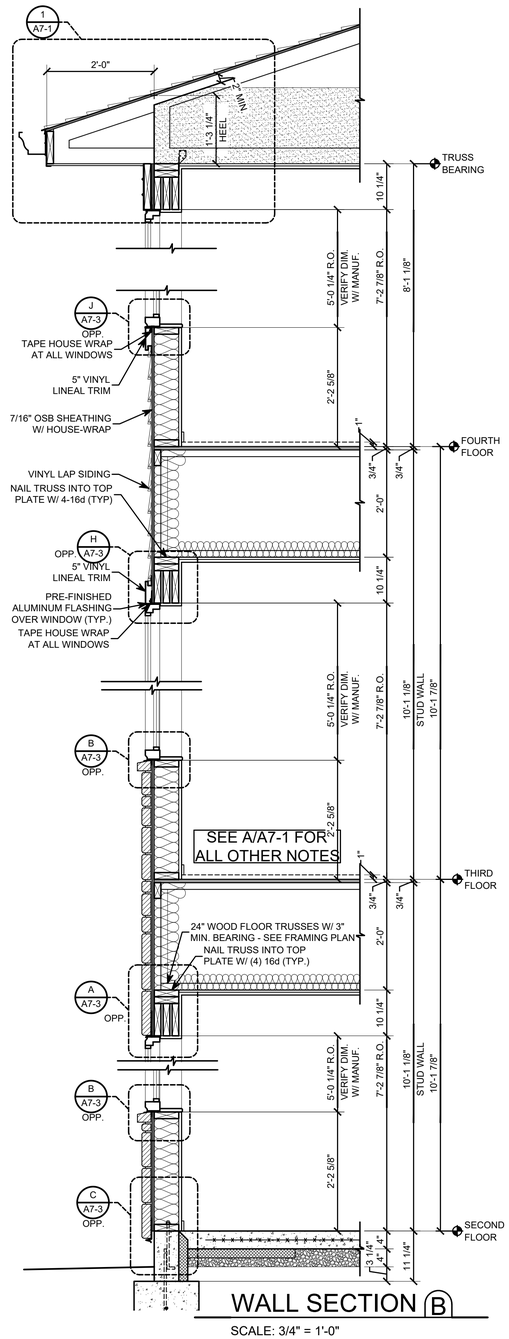



## WALL SECTION C

SCALE: 3/4" = 1'-0"

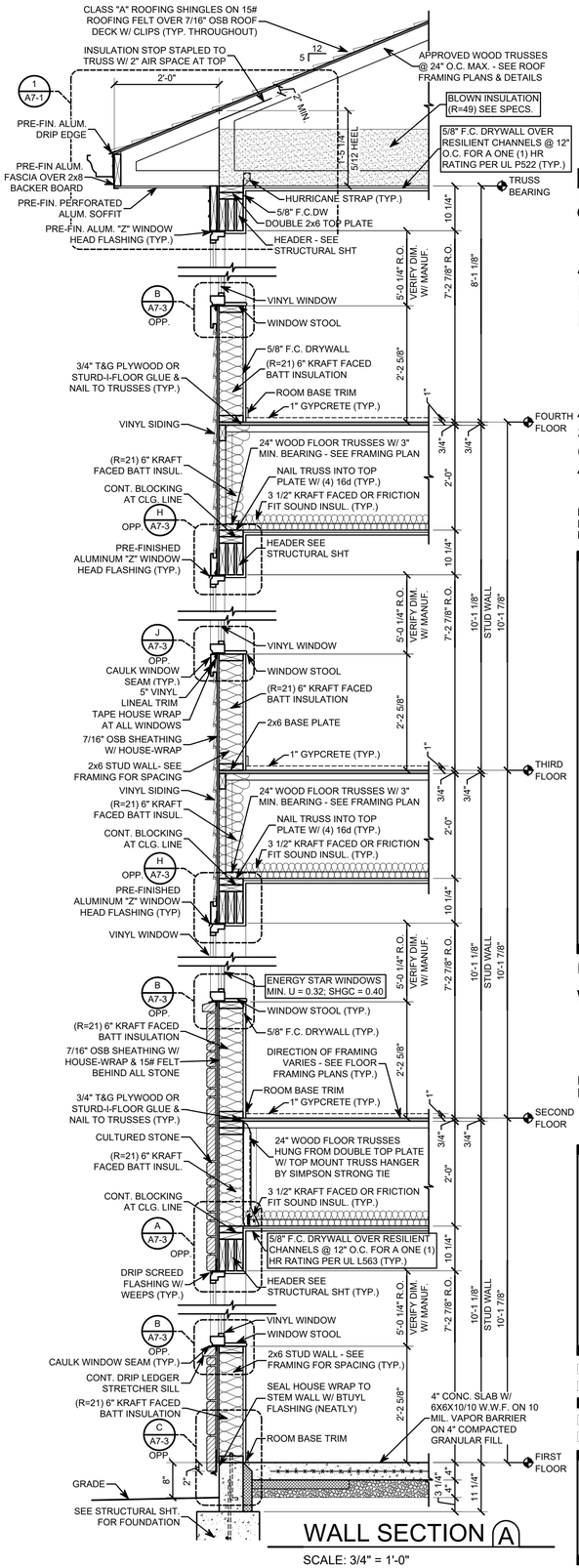
NOTES:

1. EXTERIOR WALL SYSTEMS BASED ON UL DESIGN #U356
2. FLOOR / CEILING SYSTEMS BASED ON UL DESIGN #L563
3. TENANT SEPARATION WALLS BASED ON UL DESIGN #341
4. CORRIDOR BEARING WALLS BASED ON UL DESIGN #U305
5. ROOF / CEILING SYSTEMS BASED ON UL DESIGN #P522
6. STAIR & ELEVATOR ENCLOSURES BASED ON UL DESIGN #U906
7. 2ND FL CORRIDOR, STAIRWELLS & ELEVATOR CEILING / FLOOR ASSEMBLIES BASED ON UL DESIGN #L511/ #L512
8. SEE SHEETS FR-1-FR-5 FOR FIRE RATED ASSEMBLY INSTALLATION DETAILS




## WALL SECTION B

SCALE: 3/4" = 1'-0"




## WALL SECTION A

SCALE: 3/4" = 1'-0"

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PROJECT:

# TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

## WALL SECTIONS

DATE: 06/26/2026
REVISED:

GEORGE J. KONTOGIANNIS REGISTERED No. AR00034309 STATE OF INDIANA ARCHITECT

GEORGE J. KONTOGIANNIS, LICENSE #AR00034309
EXPIRATION DATE 12/31/2027

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# A7-1

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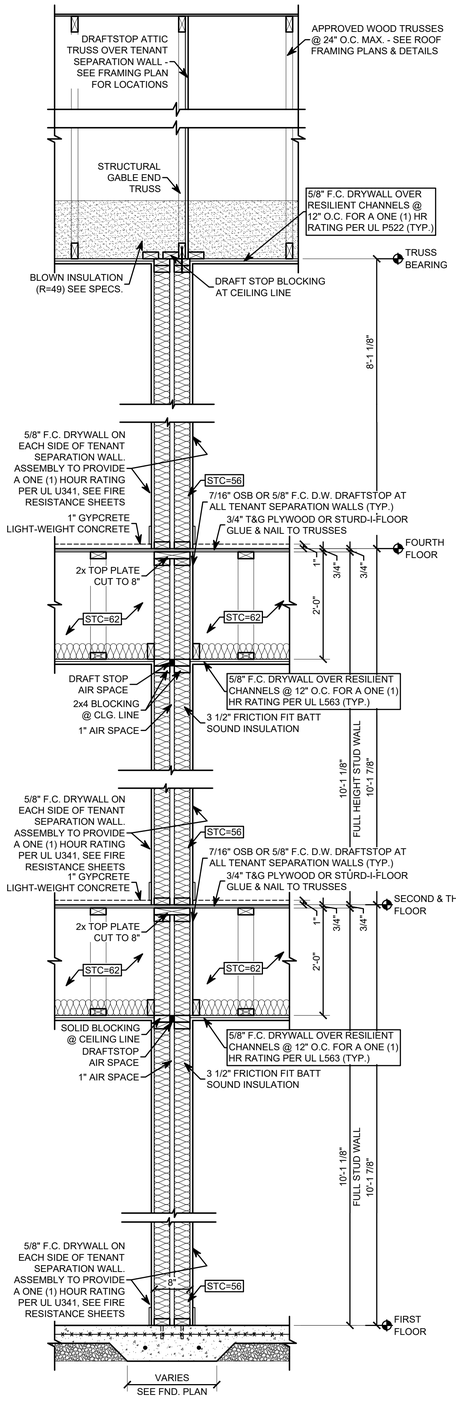
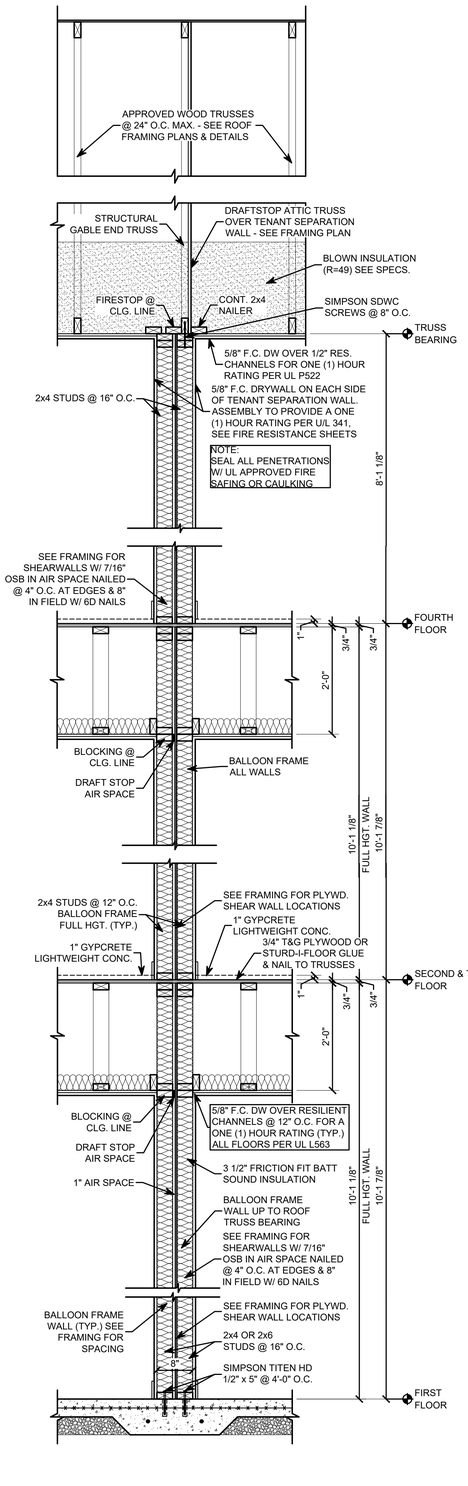


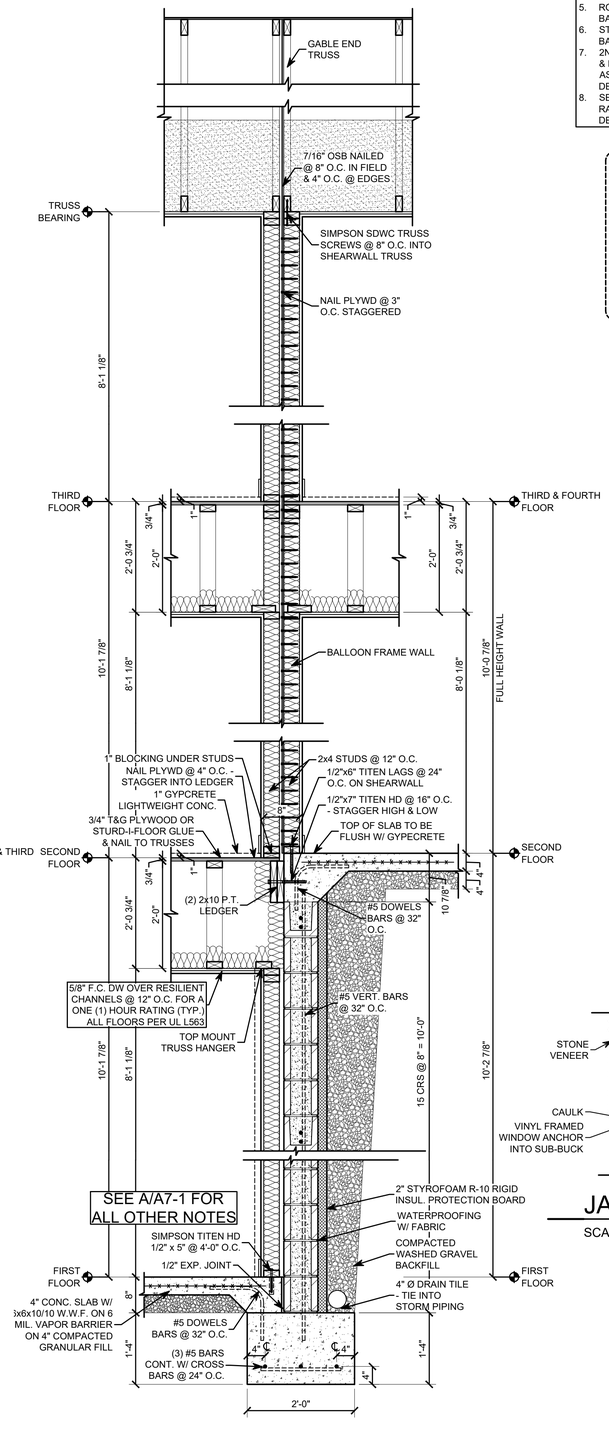

## TENANT SEPARATION WALL SECTION (E)

SCALE: 3/4" = 1'-0"




## TENANT SEPARATION / SHEARWALL WALL SECTION (D)

SCALE: 3/4" = 1'-0"



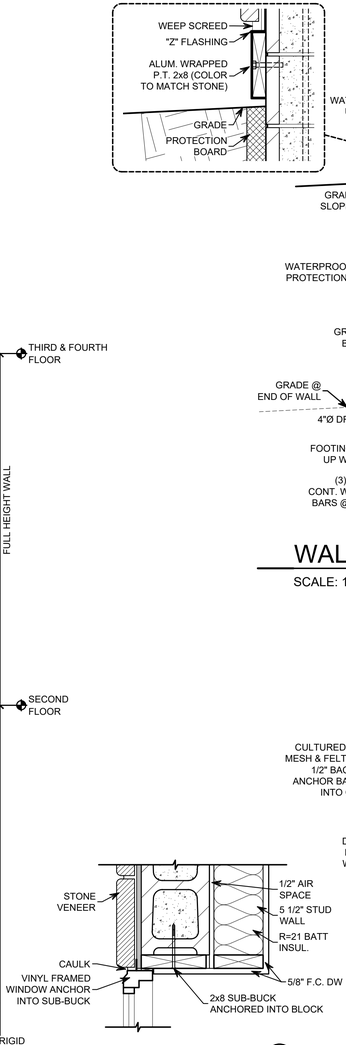

## TENANT SEPARATION / SHEARWALL WALL SECTION (C)

SCALE: 3/4" = 1'-0"

**NOTES:**

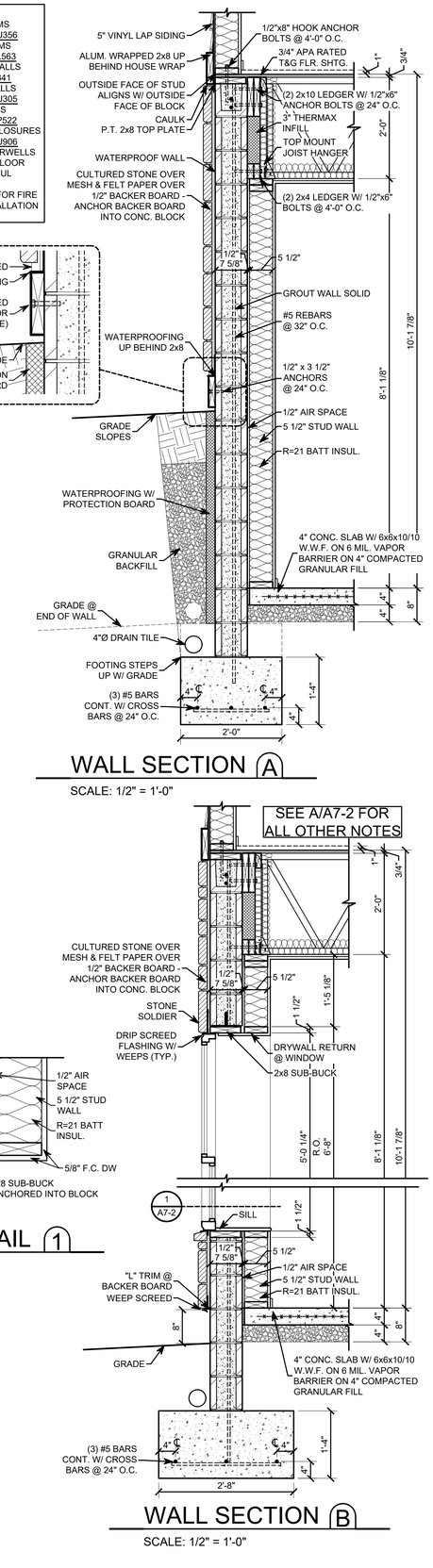
1. EXTERIOR WALL SYSTEMS BASED ON UL DESIGN #U356
2. FLOOR / CEILING SYSTEMS BASED ON UL DESIGN #L563
3. TENANT SEPARATION WALLS BASED ON UL DESIGN #341
4. CORRIDOR BEARING WALLS BASED ON UL DESIGN #U305
5. ROOF / CEILING SYSTEMS BASED ON UL DESIGN #P522
6. STAIR & ELEVATOR ENCLOSURES BASED ON UL DESIGN #U906
7. 2ND FL CORRIDOR, STAIRWELLS & ELEVATOR CEILING / FLOOR ASSEMBLIES BASED ON UL DESIGN #L511/ #L512
8. SEE SHEETS FR-1-FR-5 FOR FIRE RATED ASSEMBLY INSTALLATION DETAILS




## JAMB DETAIL (1)

SCALE: 1 1/2" = 1'-0"




## WALL SECTION (A)

SCALE: 1/2" = 1'-0"




## WALL SECTION (B)

SCALE: 1/2" = 1'-0"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PROJECT:

# TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

WALL SECTIONS

DATE: 06/26/2026
REVISED:

GEORGE J. KONTOGIANNIS REGISTERED No. AR00034309 STATE OF INDIANA ARCHITECT

GEORGE J. KONTOGIANNIS, LICENSE #AR00034309
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# A7-2


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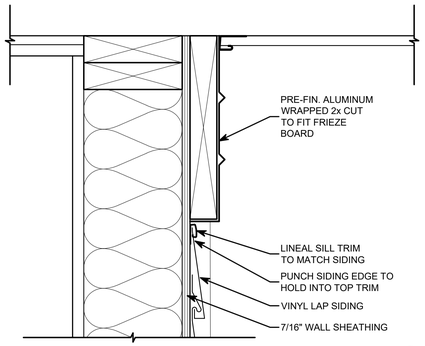
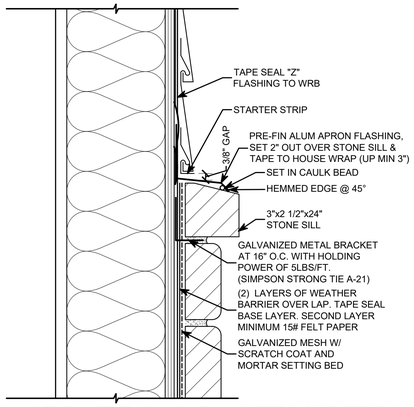


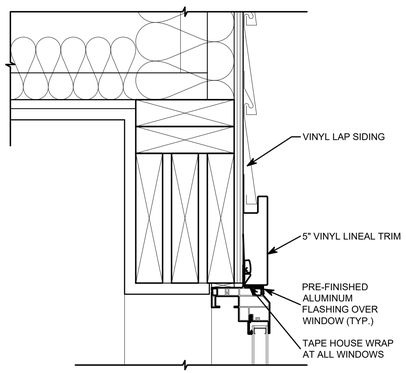

## FRIEZE DETAIL / LAP SIDING (F)

SCALE: 3" = 1'-0"



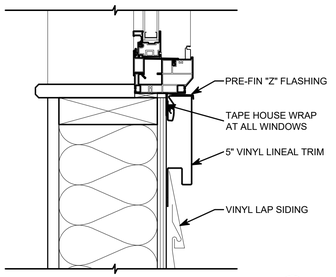

## STONE ROWLOCK TRANSITION TO VINYL SIDING DETAIL (G)

SCALE: 3" = 1'-0"



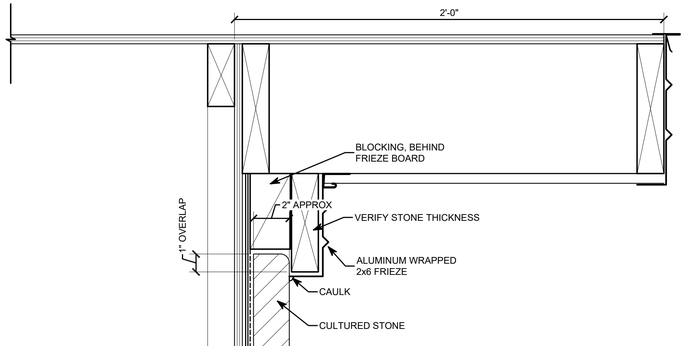

## SIDING WINDOW HEAD DETAIL (H)

SCALE: 3" = 1'-0"



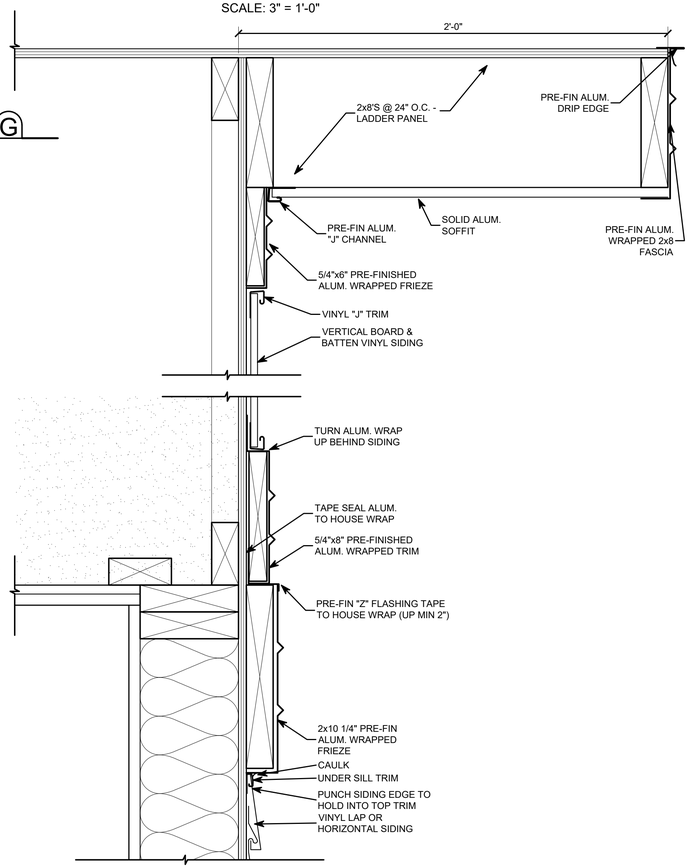

## SIDING WINDOW SILL DETAIL (J)

SCALE: 3" = 1'-0"



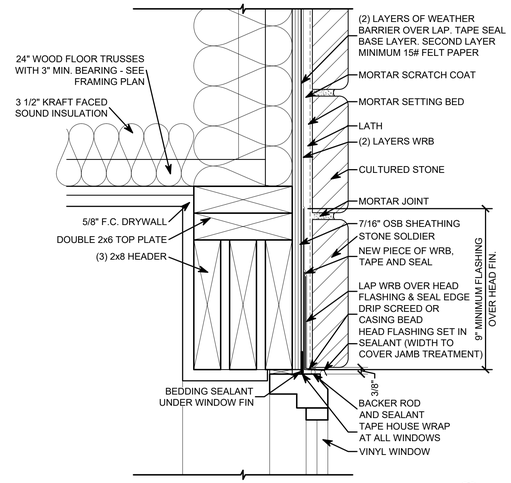

## STONE GABLE DETAIL (D)

SCALE: 3" = 1'-0"



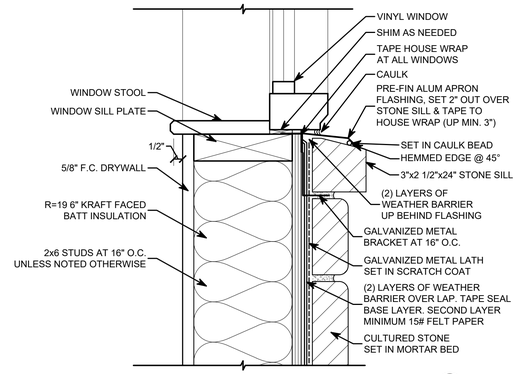

## SIDING GABLE DETAIL (E)

SCALE: 3" = 1'-0"



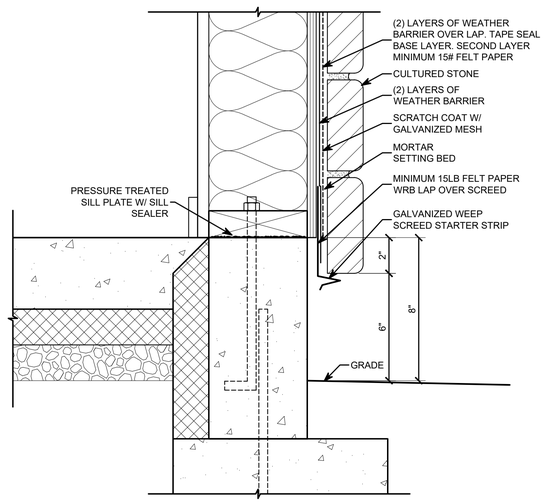

## STONE WINDOW HEAD DETAIL (A)

SCALE: 3" = 1'-0"




## STONE WINDOW SILL DETAIL (B)

SCALE: 3" = 1'-0"




## STONE SILL DETAIL (C)

SCALE: 3" = 1'-0"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PROJECT:

# TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

WALL SECTION DETAILS

DATE: 06/26/2026
REVISED:

GEORGE KONTOGIANNIS REGISTERED No. AR00034309 STATE OF INDIANA ARCHITECT

GEORGE J. KONTOGIANNIS, LICENSE #AR00034309
EXPIRATION DATE 12/31/2027


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**A7-3**


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NOTES:

1. EXTERIOR WALL SYSTEMS BASED ON UL DESIGN #U356
2. FLOOR / CEILING SYSTEMS BASED ON UL DESIGN #L563
3. TENANT SEPARATION WALLS BASED ON UL DESIGN #341
4. CORRIDOR BEARING WALLS BASED ON UL DESIGN #U305
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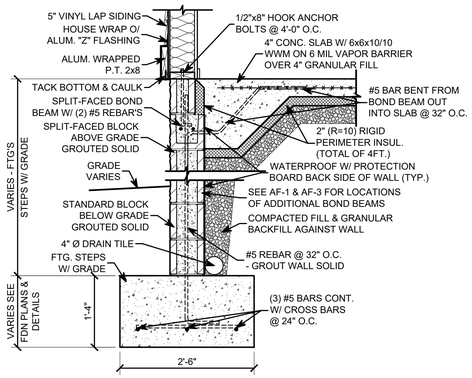
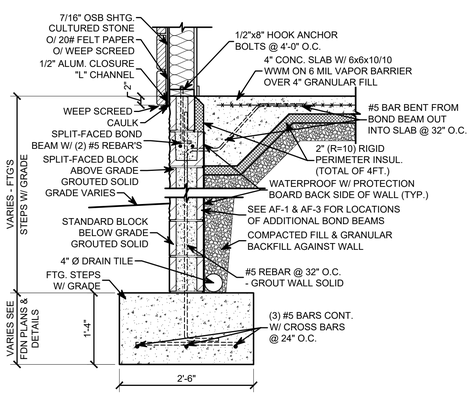
8. SEE SHEETS FR-1-FR-5 FOR FIRE RATED ASSEMBLY INSTALLATION DETAILS



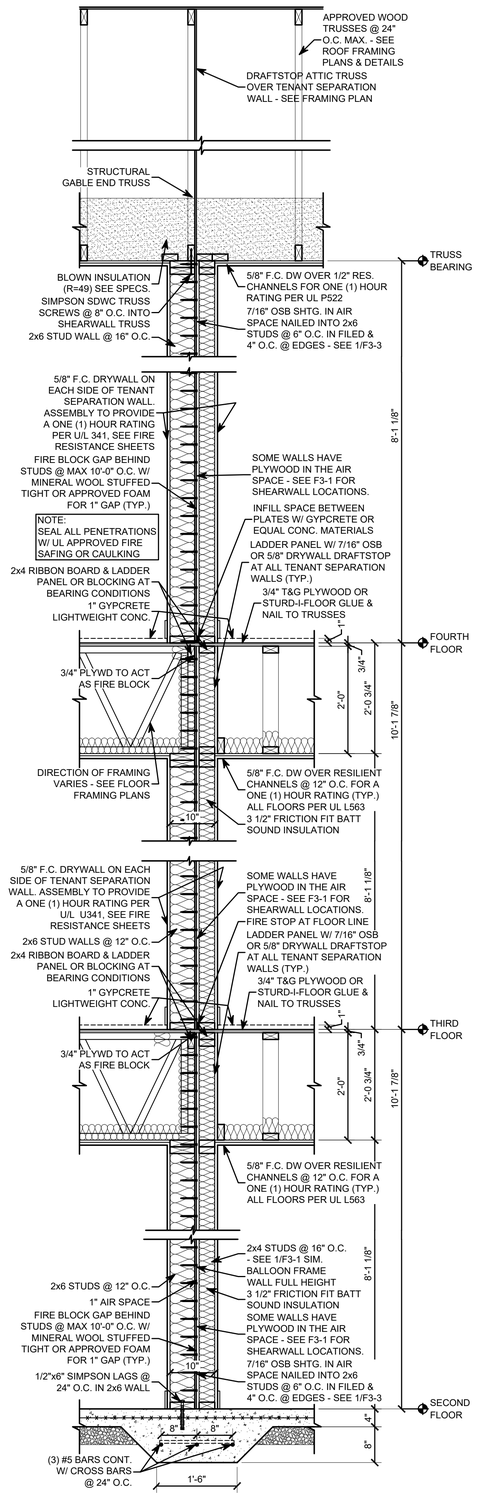

## WALL SECTION (C)

SCALE: 3/4" = 1'-0"



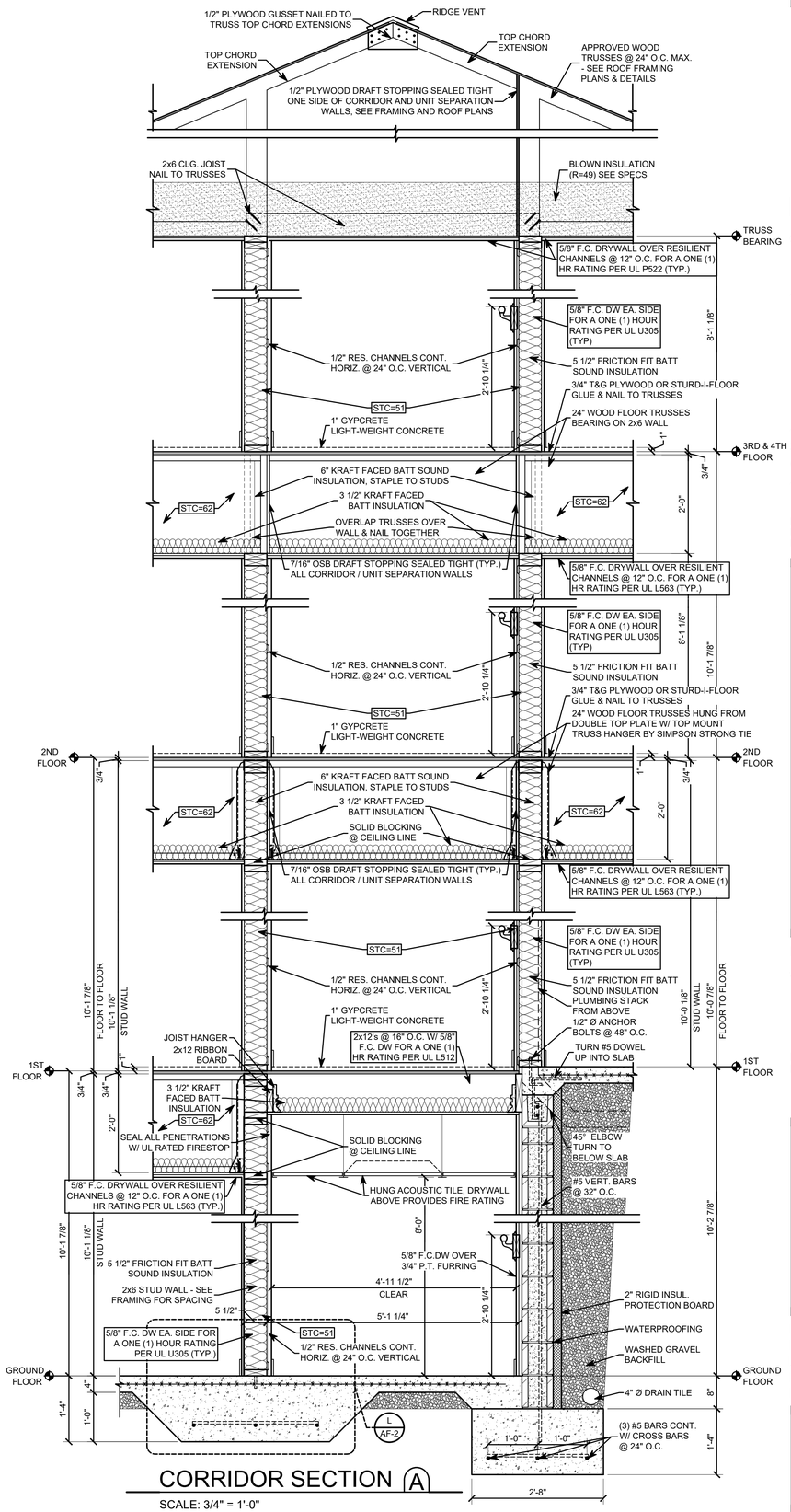

## WALL SECTION (D)

SCALE: 3/4" = 1'-0"




## TENANT SEPARATION / SHEARWALL WALL SECTION (B)

SCALE: 3/4" = 1'-0"




## CORRIDOR SECTION (A)

SCALE: 3/4" = 1'-0"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PROJECT:

# TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

WALL SECTIONS

DATE: 06/26/2026
REVISED:

GEORGE J. KONTOGIANNIS REGISTERED No. AR00034309 STATE OF INDIANA ARCHITECT

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A7-4


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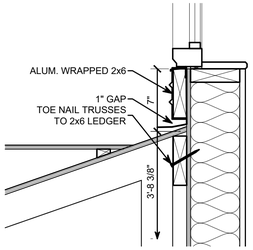
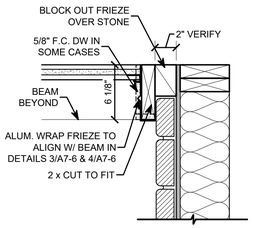


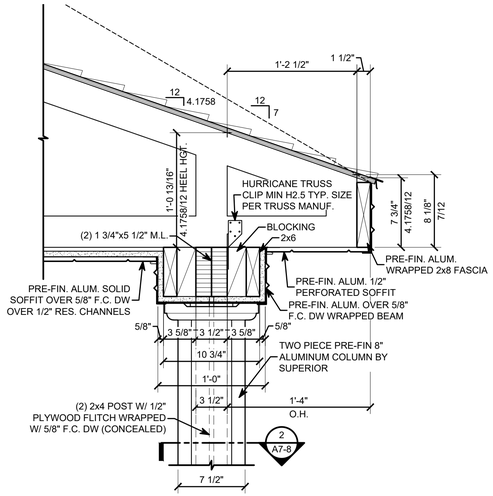

## PORCH DETAIL 5

SCALE: 1 1/2" = 1'-0"



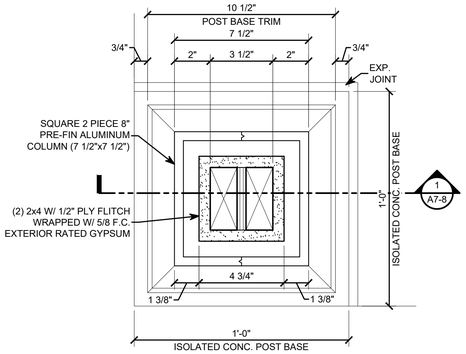

## PORCH DETAIL 4

SCALE: 1 1/2" = 1'-0"



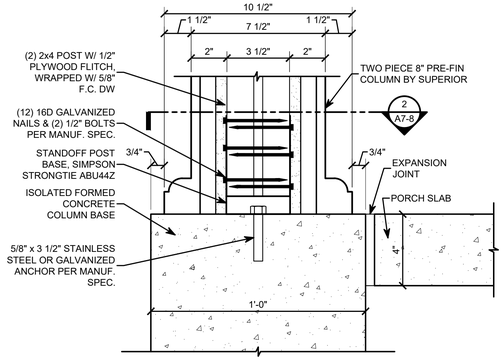

## OVERHANG DETAIL 3

SCALE: 1 1/2" = 1'-0"



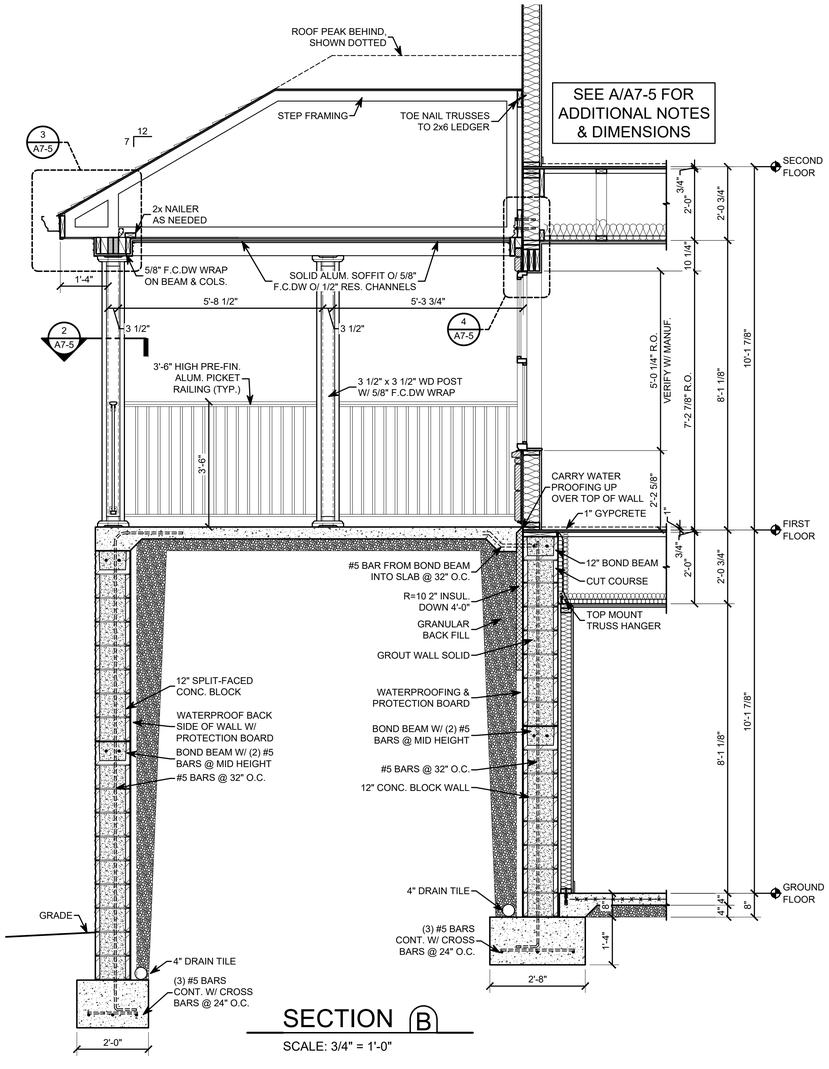

## COLUMN DETAIL 2

SCALE: 3" = 1'-0"



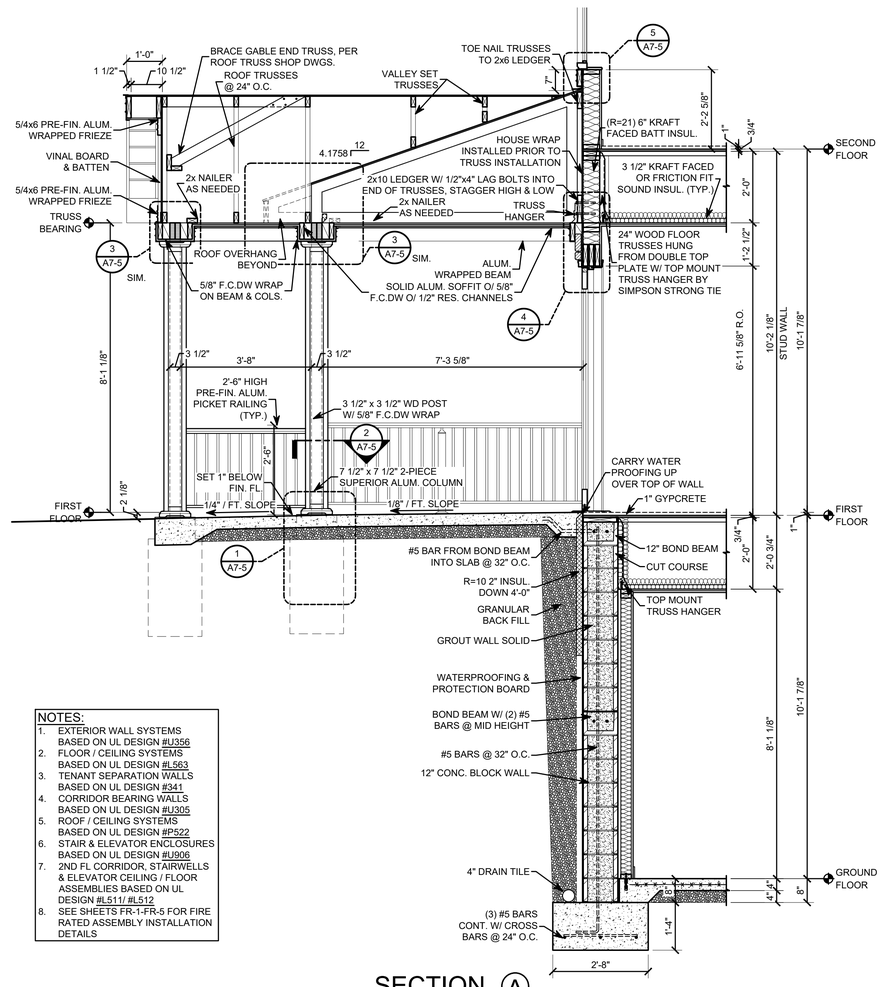

## COLUMN DETAIL 1

SCALE: 3" = 1'-0"




## SECTION B

SCALE: 3/4" = 1'-0"




## SECTION A

SCALE: 1/2" = 1'-0"

NOTES:

1. EXTERIOR WALL SYSTEMS BASED ON UL DESIGN #U356
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3. TENANT SEPARATION WALLS BASED ON UL DESIGN #341
4. CORRIDOR BEARING WALLS BASED ON UL DESIGN #U305
5. ROOF / CEILING SYSTEMS BASED ON UL DESIGN #P522
6. STAIR & ELEVATOR ENCLOSURES BASED ON UL DESIGN #U906
7. 2ND FL CORRIDOR, STAIRWELLS & ELEVATOR CEILING / FLOOR ASSEMBLIES BASED ON UL DESIGN #L511/ #L512
8. SEE SHEETS FR-1-FR-5 FOR FIRE RATED ASSEMBLY INSTALLATION DETAILS


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PROJECT:

# TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

WALL SECTIONS

DATE: 06/26/2026
REVISED:

GEORGE J. KONTOGIANNIS REGISTERED No. AR00034309 STATE OF INDIANA ARCHITECT

GEORGE J. KONTOGIANNIS, LICENSE #AR00034309
EXPIRATION DATE 12/31/2027


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- ☐ CONSTRUCTION SET

A7-5


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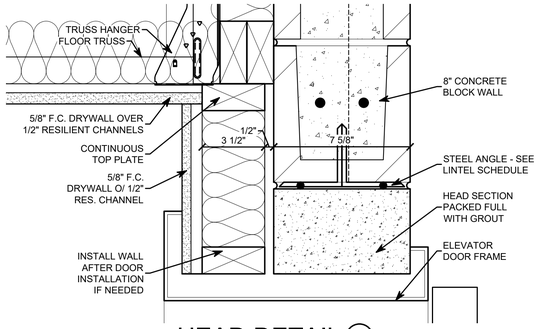
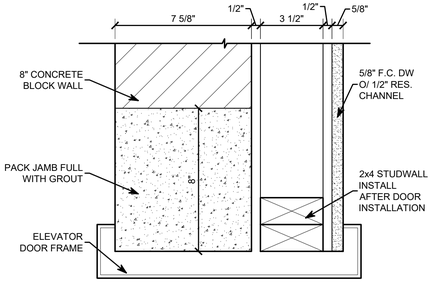


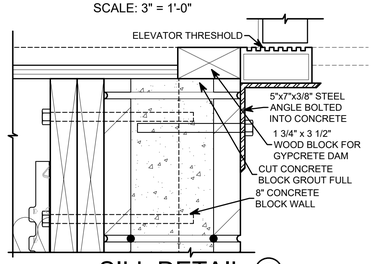

## HEAD DETAIL 4

SCALE: 3" = 1'-0"



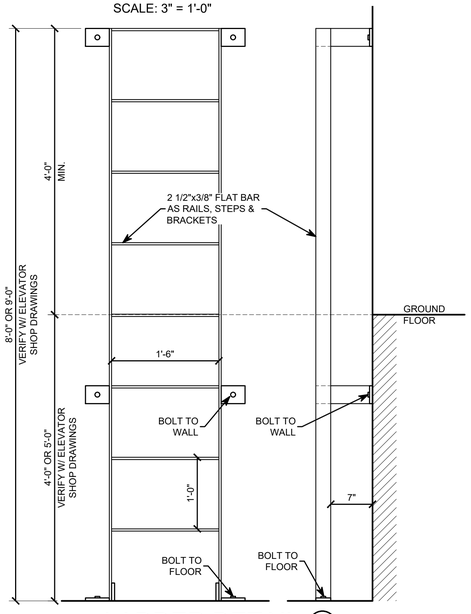

## JAMB DETAIL 3

SCALE: 3" = 1'-0"




## SILL DETAIL 2

SCALE: 3" = 1'-0"



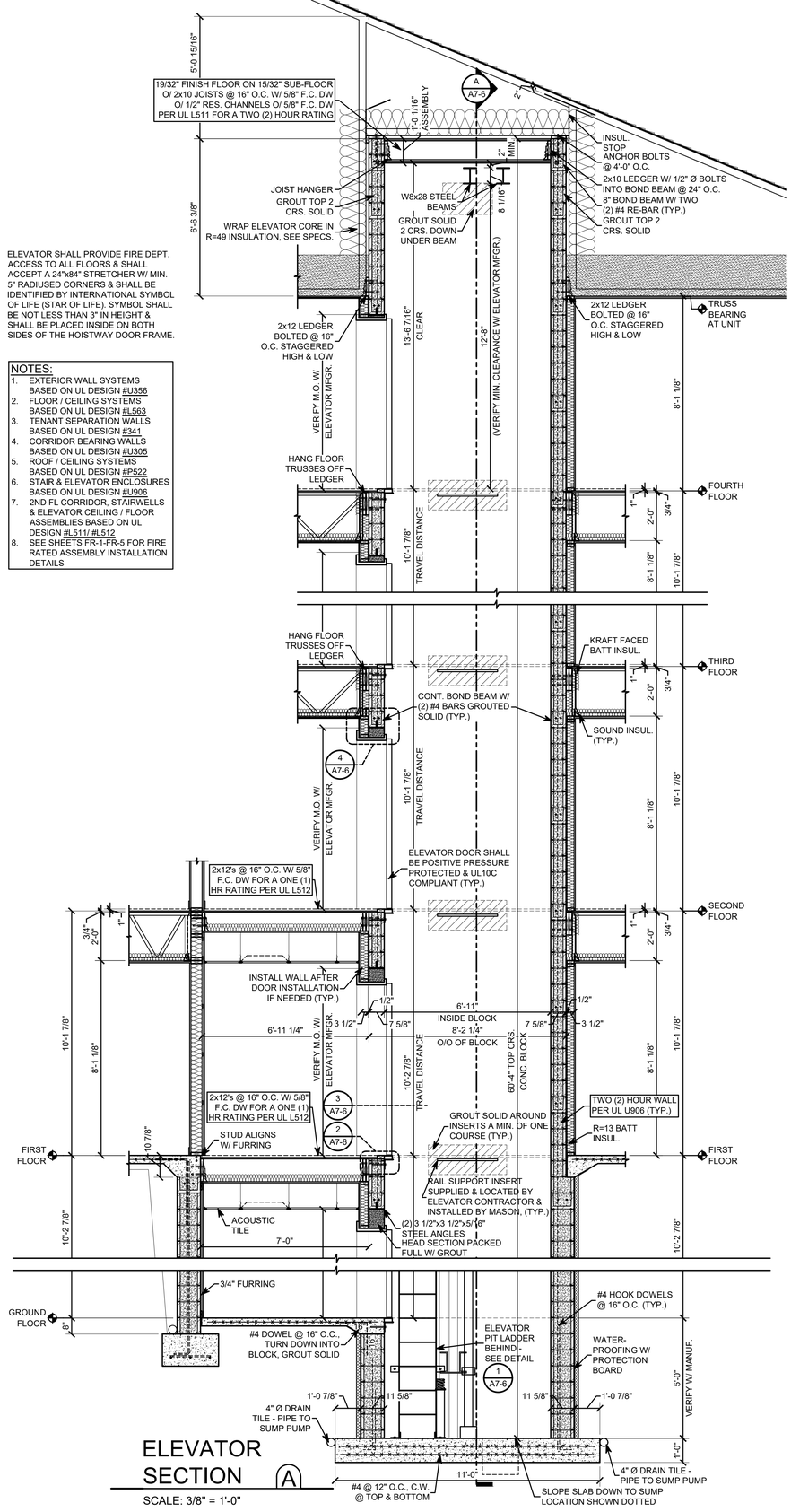

## LADDER DETAIL 1

SCALE: 1" = 1'-0"

ELEVATOR SHALL PROVIDE FIRE DEPT. ACCESS TO ALL FLOORS & SHALL ACCEPT A 24"x84" STRETCHER W/ MIN. 5" RADIUSED CORNERS & SHALL BE IDENTIFIED BY INTERNATIONAL SYMBOL OF LIFE (STAR OF LIFE). SYMBOL SHALL BE NOT LESS THAN 3" IN HEIGHT & SHALL BE PLACED INSIDE ON BOTH SIDES OF THE HOISTWAY DOOR FRAME.

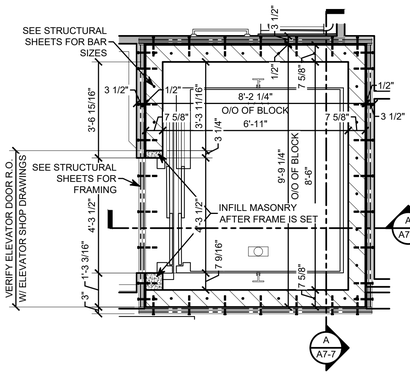
NOTES:

1. EXTERIOR WALL SYSTEMS BASED ON UL DESIGN #U356
2. FLOOR / CEILING SYSTEMS BASED ON UL DESIGN #L563
3. TENANT SEPARATION WALLS BASED ON UL DESIGN #341
4. CORRIDOR BEARING WALLS BASED ON UL DESIGN #U305
5. ROOF / CEILING SYSTEMS BASED ON UL DESIGN #P522
6. STAIR & ELEVATOR ENCLOSURES BASED ON UL DESIGN #U906
7. 2ND FL CORRIDOR, STAIRWELLS & ELEVATOR CEILING / FLOOR ASSEMBLIES BASED ON UL DESIGN #L511/ #L512
8. SEE SHEETS FR-1-FR-5 FOR FIRE RATED ASSEMBLY INSTALLATION DETAILS



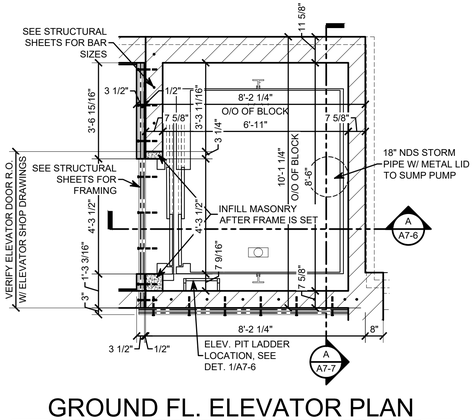

## ELEVATOR SECTION A

SCALE: 3/8" = 1'-0"




## 1st, 2nd, 3rd & 4th FL. ELEVATOR PLAN

SCALE: 3/8" = 1'-0"




## GROUND FL. ELEVATOR PLAN

SCALE: 3/8" = 1'-0"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PROJECT:

# TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

ENLARGED
ELEVATOR PLANS
& SECTIONS

DATE: 06/26/2026
REVISED:

GEORGE J. KONTOGIANNIS
REGISTERED
No. AR00034309
STATE OF
INDIANA
ARCHITECT

GEORGE J. KONTOGIANNIS, LICENSE #AR00034309
EXPIRATION DATE 12/31/2027


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A7-6


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ELEVATOR SHALL PROVIDE FIRE DEPT. ACCESS TO ALL FLOORS & SHALL ACCEPT A 24"x84" STRETCHER W/ MIN. 5" RADIUSED CORNERS & SHALL BE IDENTIFIED BY INTERNATIONAL SYMBOL OF LIFE (STAR OF LIFE). SYMBOL SHALL BE NOT LESS THAN 3" IN HEIGHT & SHALL BE PLACED INSIDE ON BOTH SIDES OF THE HOISTWAY DOOR FRAME.

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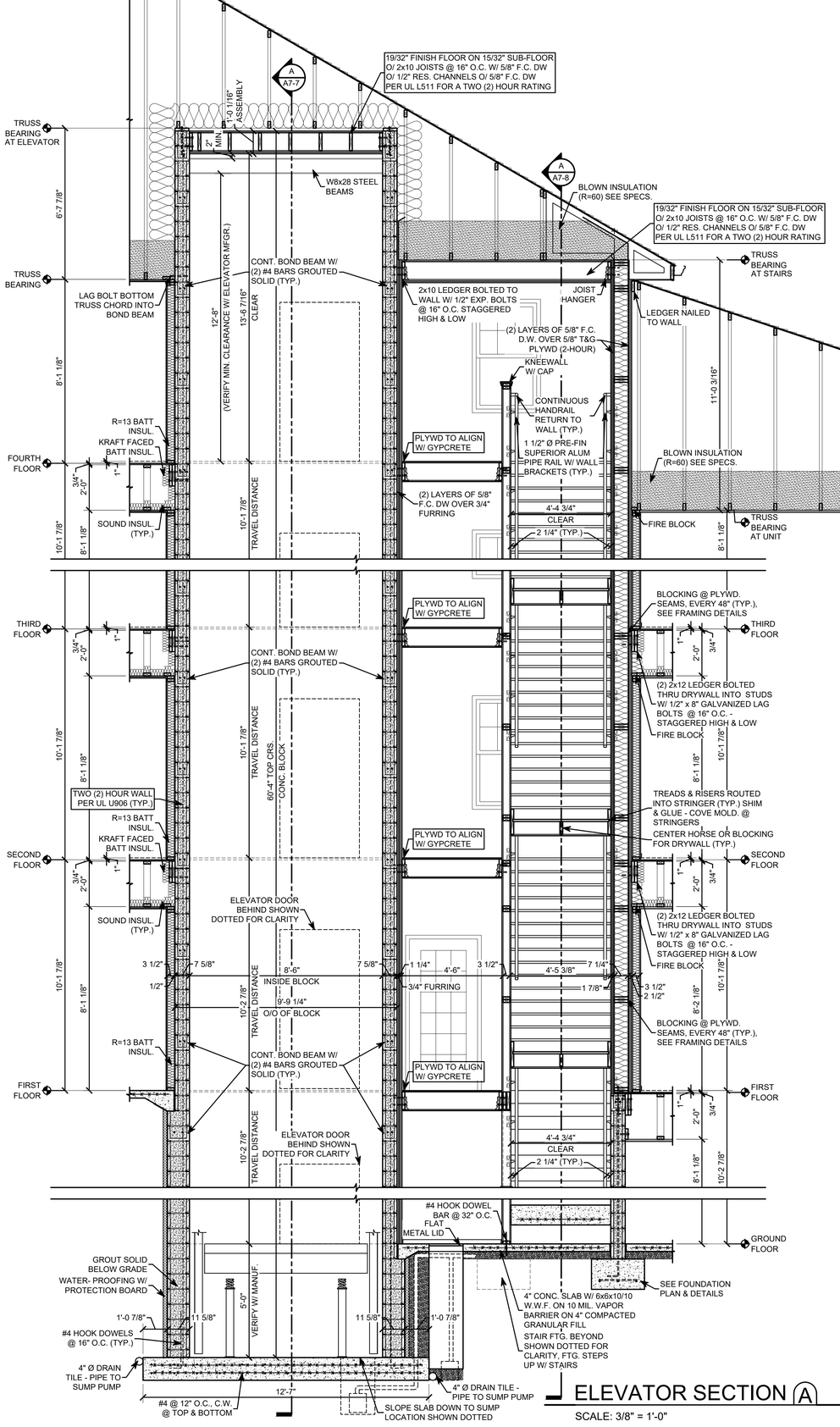
8. SEE SHEETS FR-1-FR-5 FOR FIRE RATED ASSEMBLY INSTALLATION DETAILS




ELEVATOR SECTION A

SCALE: 3/8" = 1'-0"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PROJECT:

# TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

## ELEVATOR & STAIR SECTION

DATE: 06/26/2026
REVISED:

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A7-7


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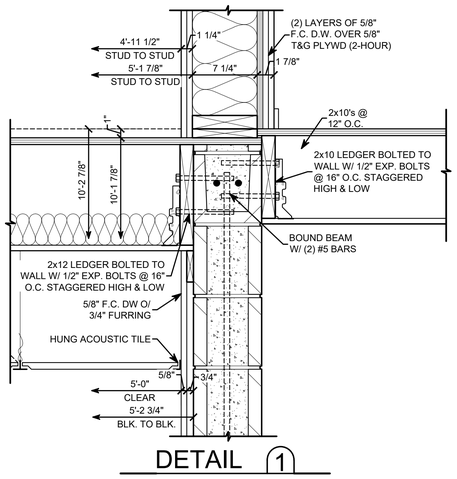


DETAIL 1

SCALE: 1 1/2" = 1'-0"

NOTES:

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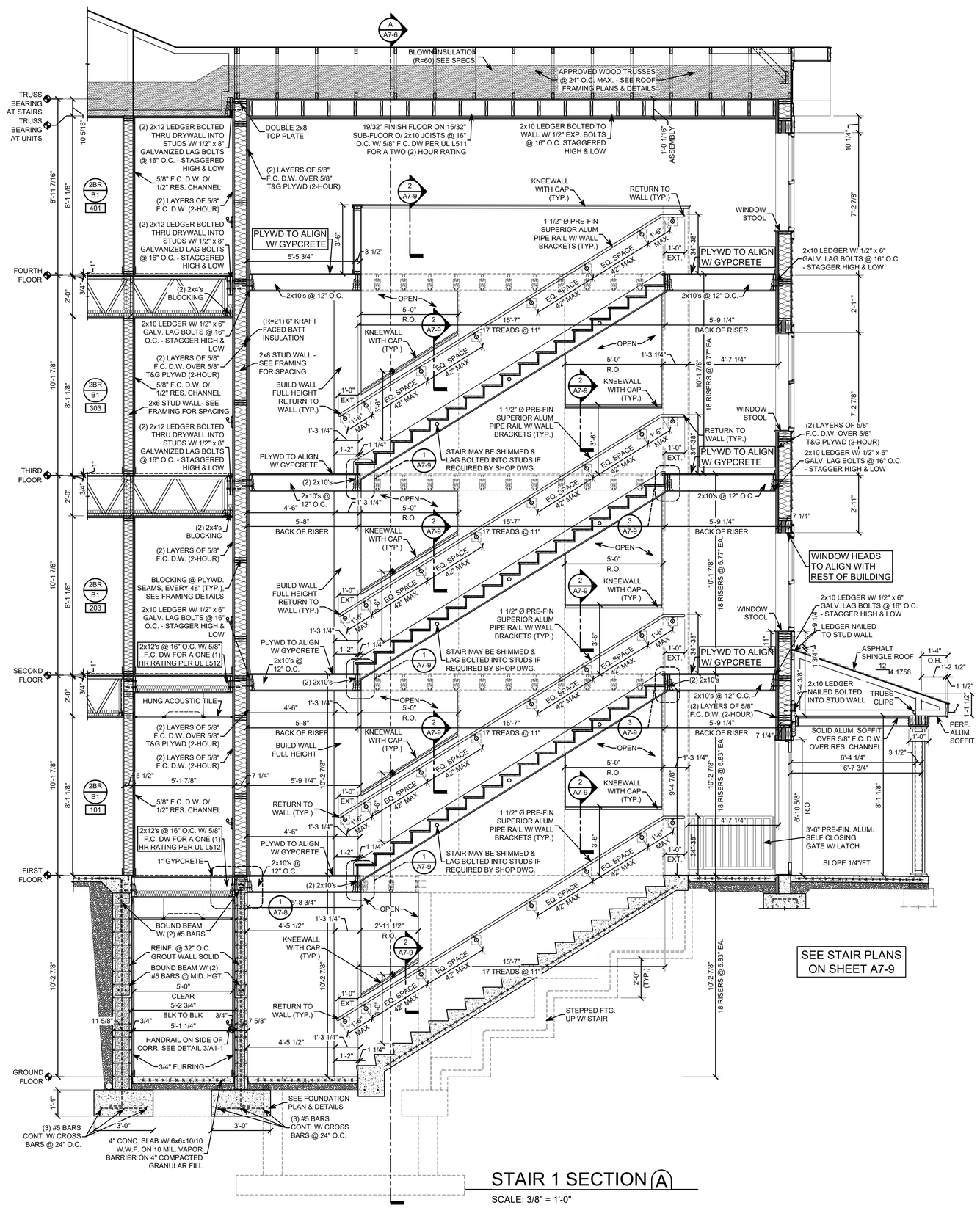


SEE STAIR PLANS ON SHEET A7-9

STAIR 1 SECTION A

SCALE: 3/8" = 1'-0"

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PROJECT:

TANNER'S CREEK MANOR

58 DOUGHTY ROAD, LAWRENCEBURG, IN 47025

DRAWING TITLE:

STAIR 1 SECTION

DATE: 06/26/2026
REVISED:

GEORGE J. KONTOGIANNIS REGISTERED No. AR00034309 STATE OF INDIANA ARCHITECT

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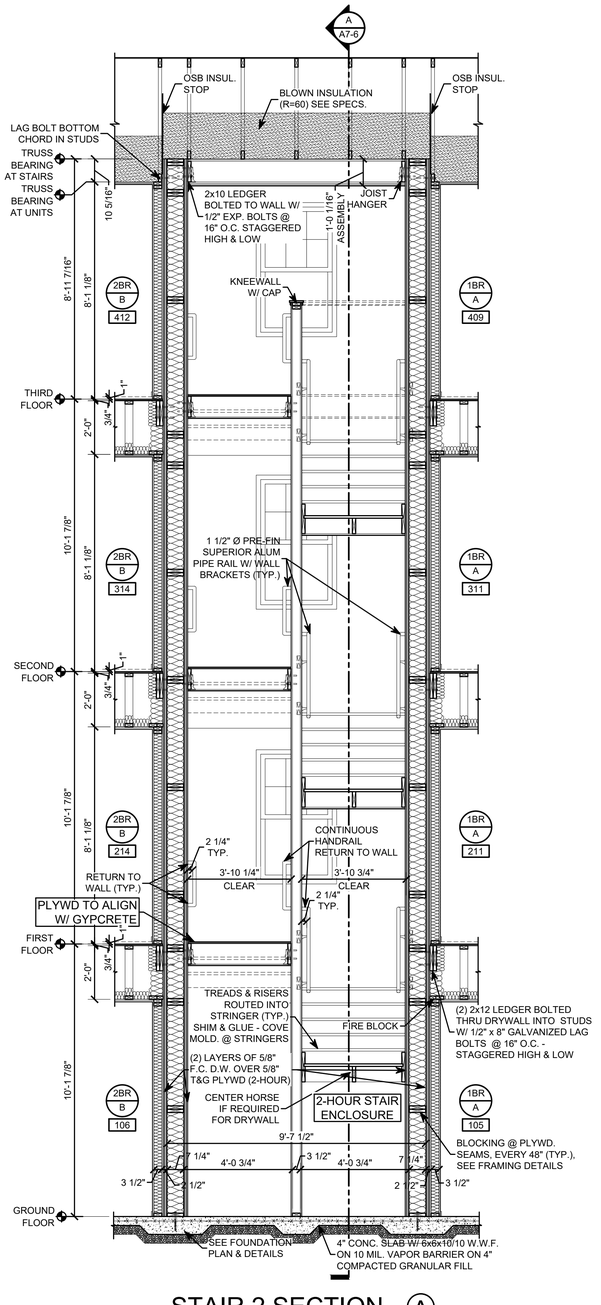
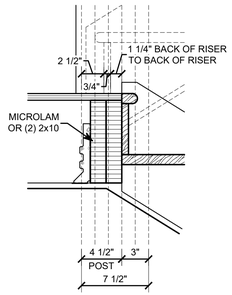
A7-8



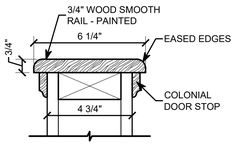

## STAIR 2 SECTION (A)

SCALE: 3/8" = 1'-0"



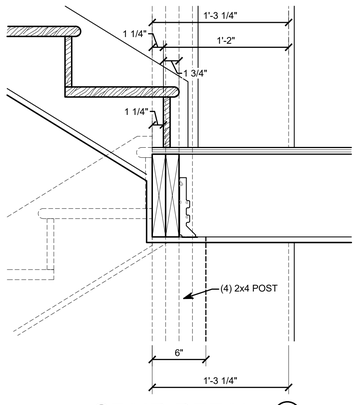

## STAIR DETAIL (3)

SCALE: 1 1/2" = 1'-0"



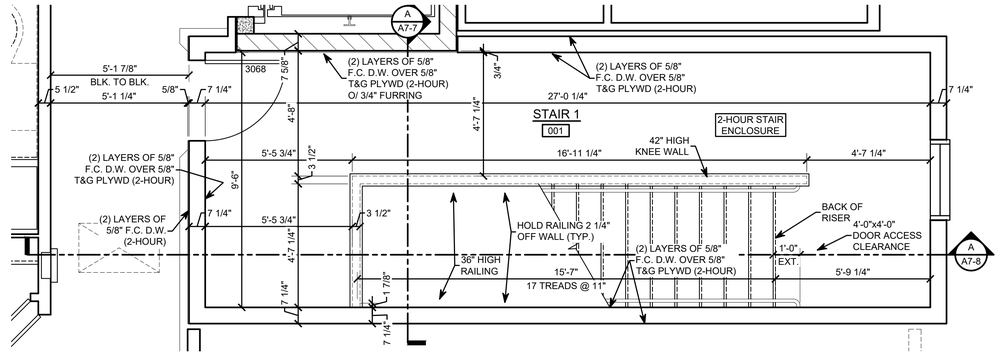

## KNEEWALL CAP DETAIL (2)

SCALE: 3" = 1'-0"



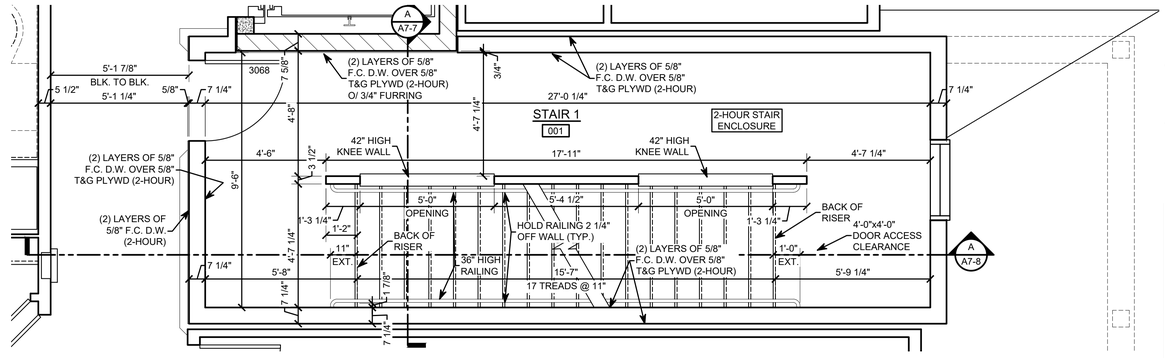

## STAIR DETAIL (1)

SCALE: 1 1/2" = 1'-0"



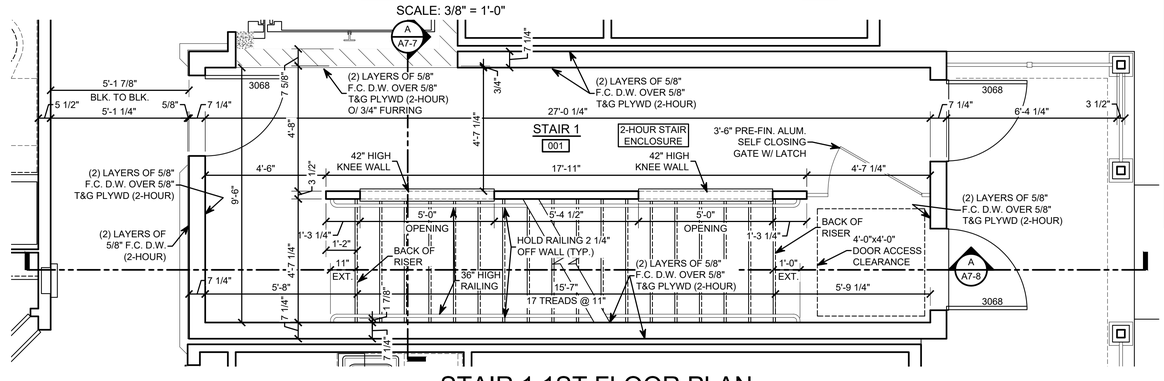

## STAIR 1 4TH FLOOR PLAN

SCALE: 3/8" = 1'-0"



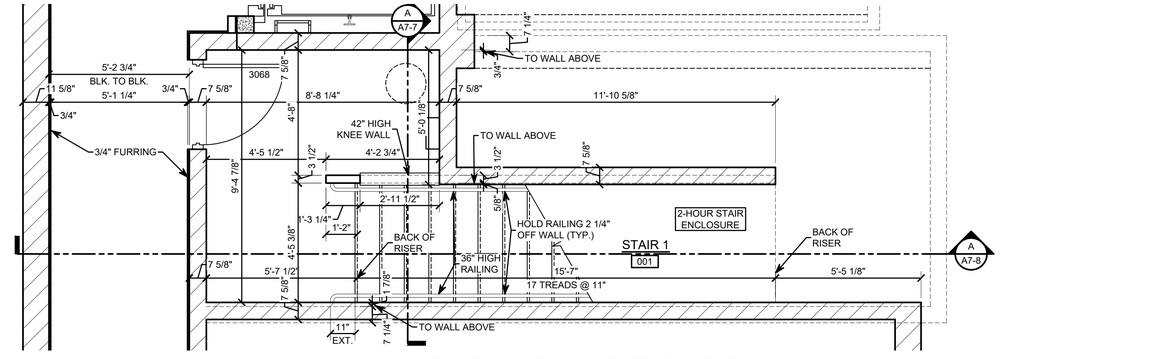

## STAIR 1 2ND & 3RD FLOOR PLAN

SCALE: 3/8" = 1'-0"




## STAIR 1 1ST FLOOR PLAN

SCALE: 3/8" = 1'-0"




## STAIR 1 GROUND FLOOR PLAN

SCALE: 3/8" = 1'-0"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PROJECT:

**TANNER'S CREEK MANOR**

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

**STAIR 1 PLAN, SECTION & DETAILS**

DATE: 06/26/2026
REVISED:

GEORGE J. KONTOGIANNIS REGISTERED No. AR00034309 STATE OF INDIANA ARCHITECT

GEORGE J. KONTOGIANNIS, LICENSE #AR00034309
EXPIRATION DATE 12/31/2027


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**A7-9**


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NOTES:
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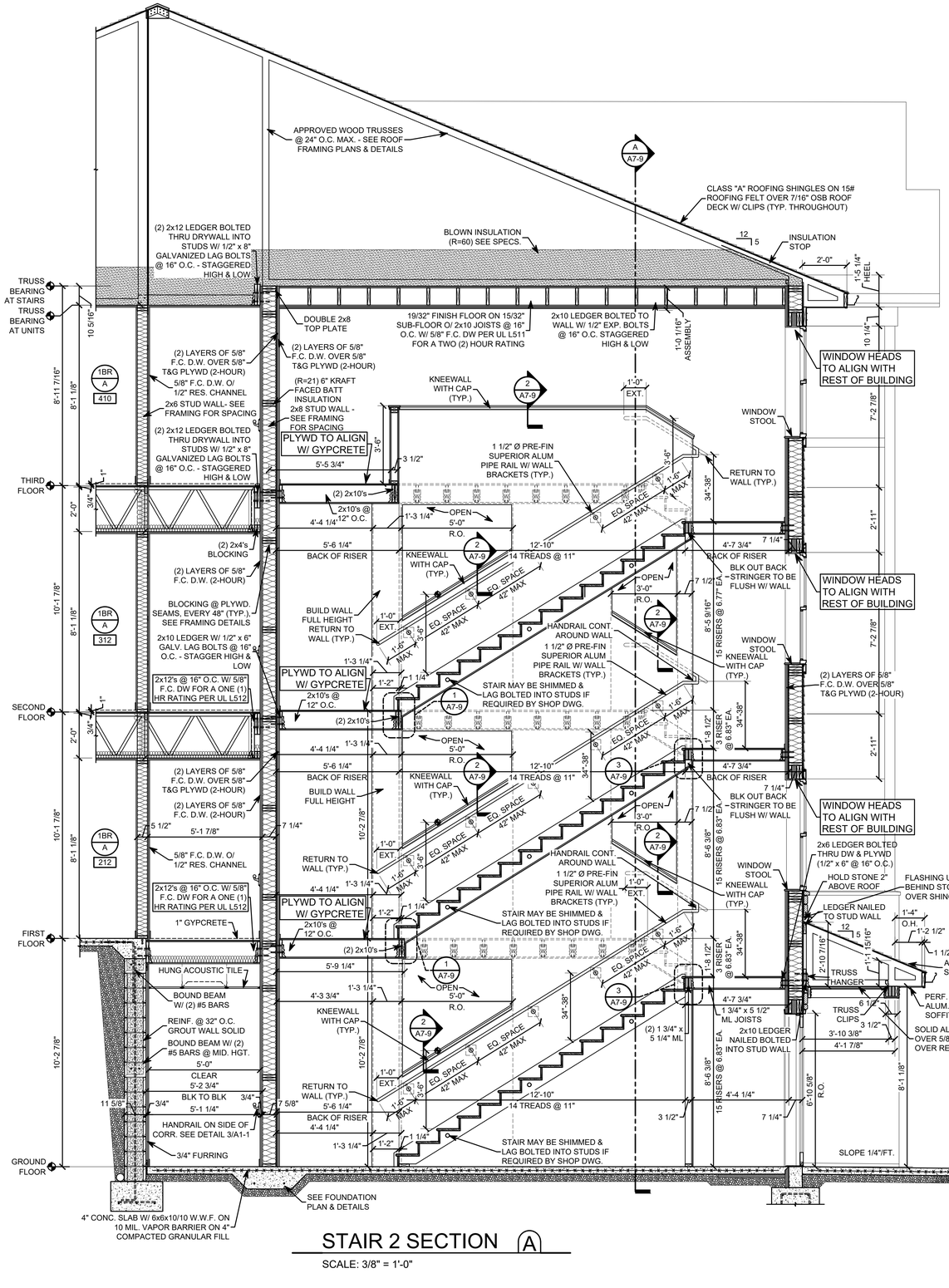
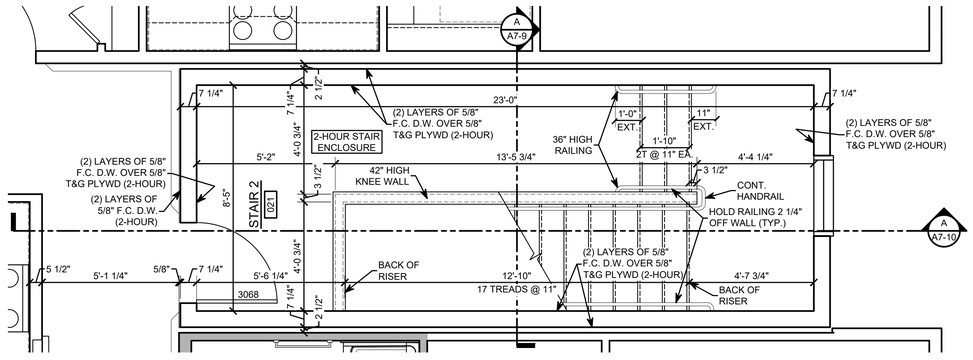
8. SEE SHEETS FR-1-FR-5 FOR FIRE RATED ASSEMBLY INSTALLATION DETAILS



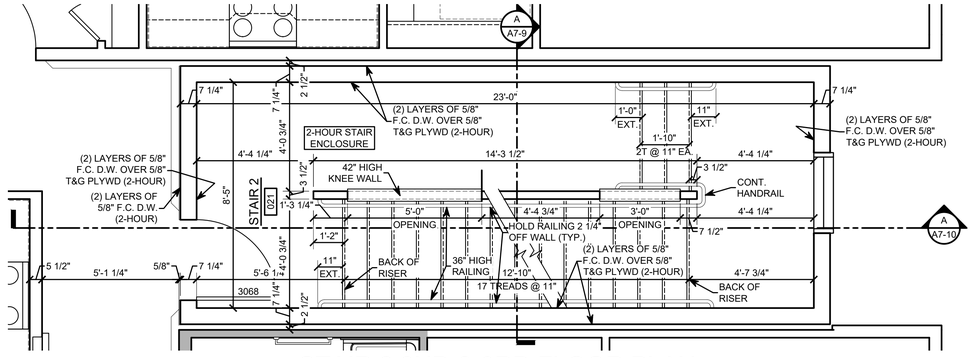

## STAIR 2 SECTION (A)

SCALE: 3/8" = 1'-0"



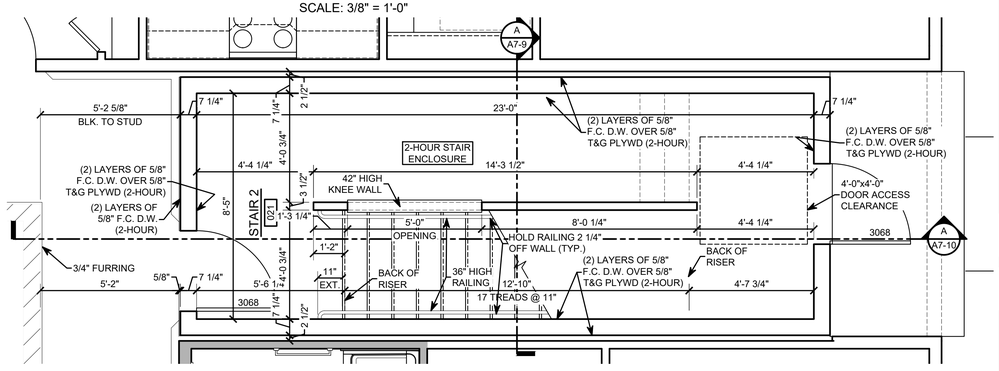

## STAIR 2 4TH FLOOR PLAN

SCALE: 3/8" = 1'-0"




## STAIR 2 2ND & 3RD FLOOR PLAN

SCALE: 3/8" = 1'-0"




## STAIR 2 1ST FLOOR PLAN

SCALE: 3/8" = 1'-0"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PROJECT:

# TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

STAIR 2 PLANS & SECTION

DATE: 06/26/2026
REVISED:

GEORGE J. KONTOGIANNIS REGISTERED No. AR00034309 STATE OF INDIANA ARCHITECT

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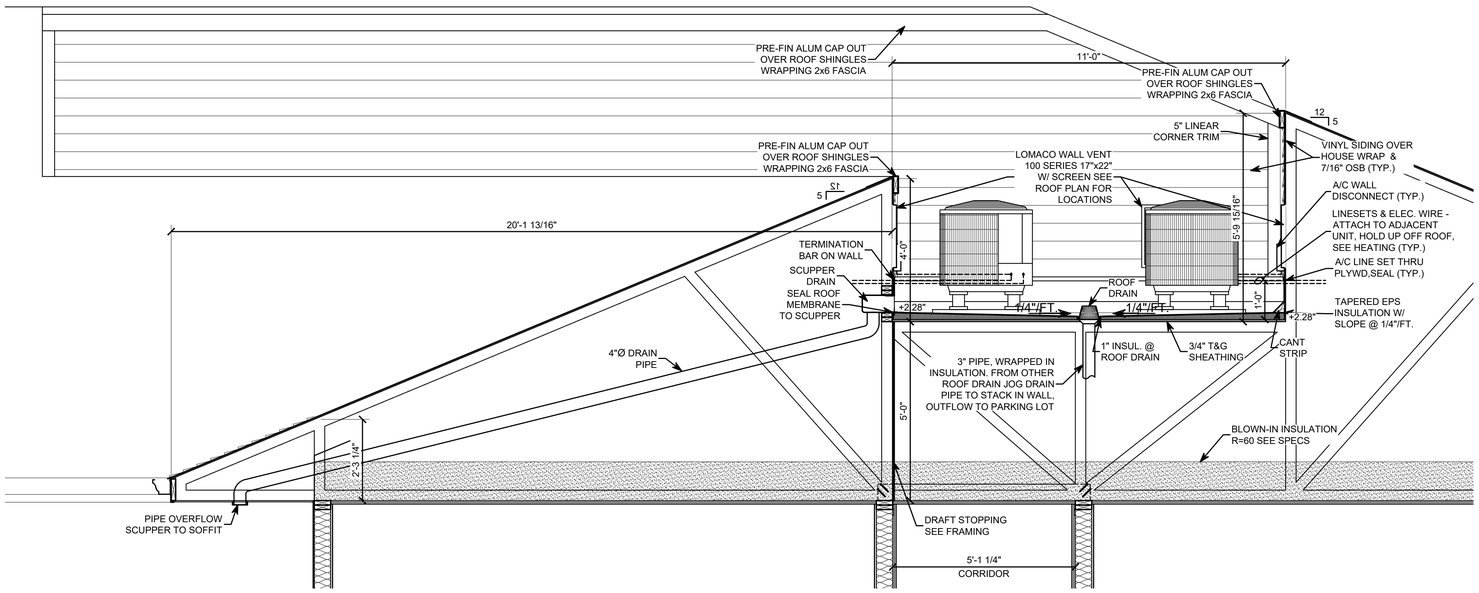
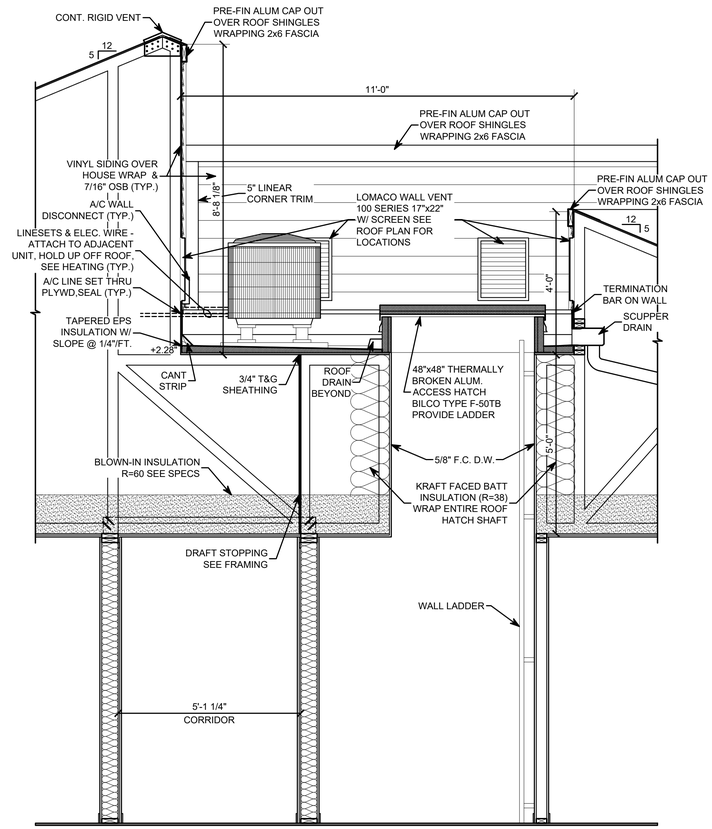


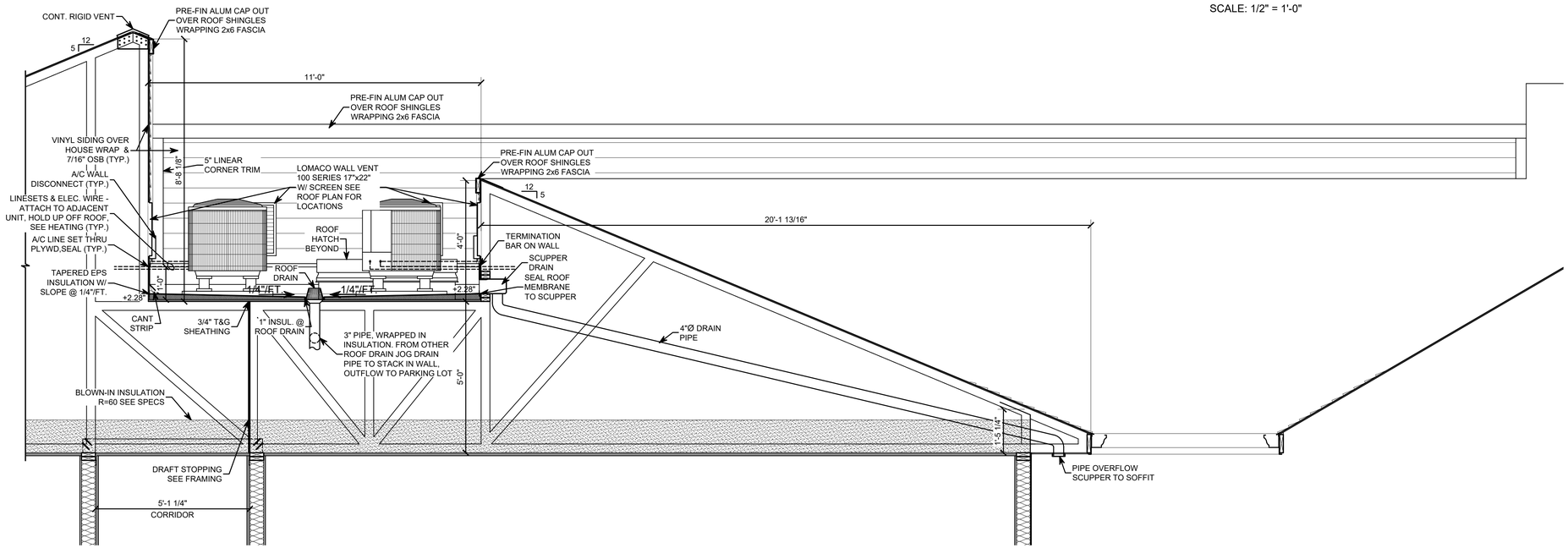

## FLAT ROOF SECTION (B)

SCALE: 1/2" = 1'-0"




## FLAT ROOF SECTION (C)

SCALE: 1/2" = 1'-0"




## FLAT ROOF SECTION (A)

SCALE: 1/2" = 1'-0"


**KONTOGIANNIS**
& ASSOCIATES

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PROJECT:

# TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

FLAT ROOF
SECTIONS

DATE: 06/26/2026
REVISED:

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**A7-11**


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## FLOOR FRAMING GENERAL NOTES:

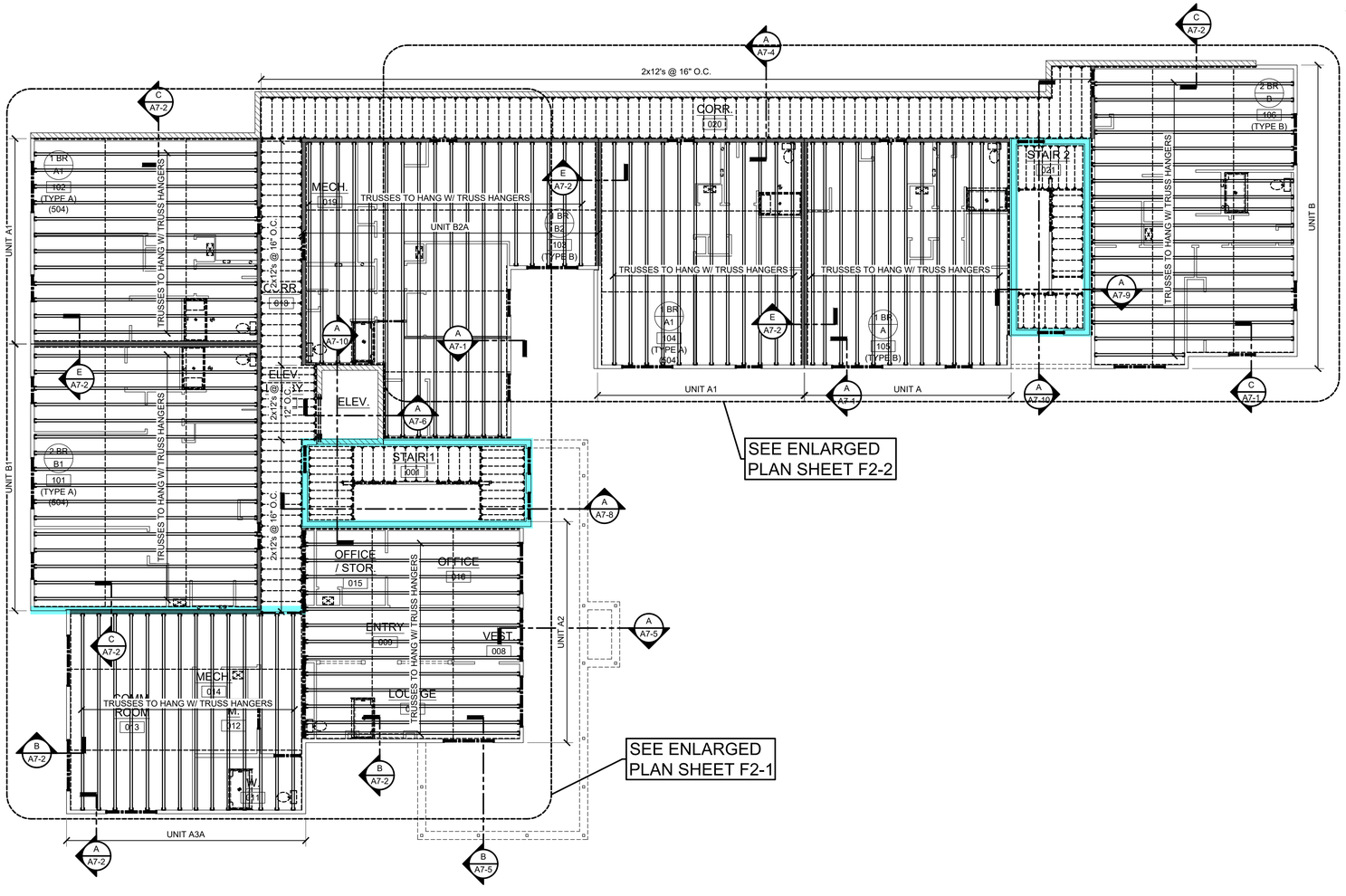
1. ALL FLOOR TRUSSES ARE TO BE 24" O.C. UNLESS NOTED OTHERWISE.
2. PROVIDE METAL FLOOR TRUSS HANGERS FOR ALL HANGING FLOOR TRUSSES.
3. WHERE FLOOR TRUSSES ARE REQUIRED TO FRAME INTO OTHER FLOOR TRUSSES OR LEDGERS, DESIGN OF THE CONNECTIONS ARE TO BE THE RESPONSIBILITY OF THE TRUSS SUPPLIER. THE TRUSS SUPPLIER IS TO MAKE NECESSARY PROVISIONS IN THE SUPPORTING TRUSS TO ACCEPT THE TYPE OF HANGER REQUIRED. THE DESIGN OF ALL WEB MEMBER PERMANENT BRACING REQUIRED FOR THE STRUCTURAL ADEQUACY OF THE TRUSSES, IS TO BE THE SOLE RESPONSIBILITY OF THE TRUSS SUPPLIER. ADDITIONAL PERMANENT BRACE SIZES AND CONNECTIONS, NOT PROVIDED BY THE SHEATHING SHOWN ON THE CONSTRUCTION DRAWINGS, ARE TO BE THE SOLE RESPONSIBILITY OF THE TRUSS SUPPLIER. THIS BRACING CAN INCLUDE, BUT IS NOT LIMITED TO, STRONG BACK BRACING. PROVIDE ANY AND ALL DETAILS WITH FLOOR TRUSS SUBMITTALS.
4. PLUMBING DROPS AND MECHANICAL PLENUMS SHOWN DOTTED. PROVIDE DROPS ON SHOP DRAWING LAYOUTS.
5. 2x6 STRONGBACKS TO BE INSTALLED VERTICALLY PER THE SHOP DRAWING DETAILS AT THE TOP OR BOTTOM OF TRUSSES SPACED AT MAX. 10'-0" APART.

## FRAMING LEGEND

- POINT LOAD CONT. TO FOOTING
- FLOOR TRUSS
- ROOF TRUSS
- ROOF LINE
- CONVENTIONAL FRAMING OR VALLEY SET TRUSSES
- HEADER
- SHEAR WALL
- DRAFTSTOPPING
- INTERIOR BEARING WALL
- METAL JOIST OR TRUSS HANGERS
- SEE WALL SCHEDULE
- SIMPSON HOLD DOWNS
- (1) HEATING PLENUM, (2) DRYER DUCT, (3) PLUMBING DROPS & (4) WASHER BOX

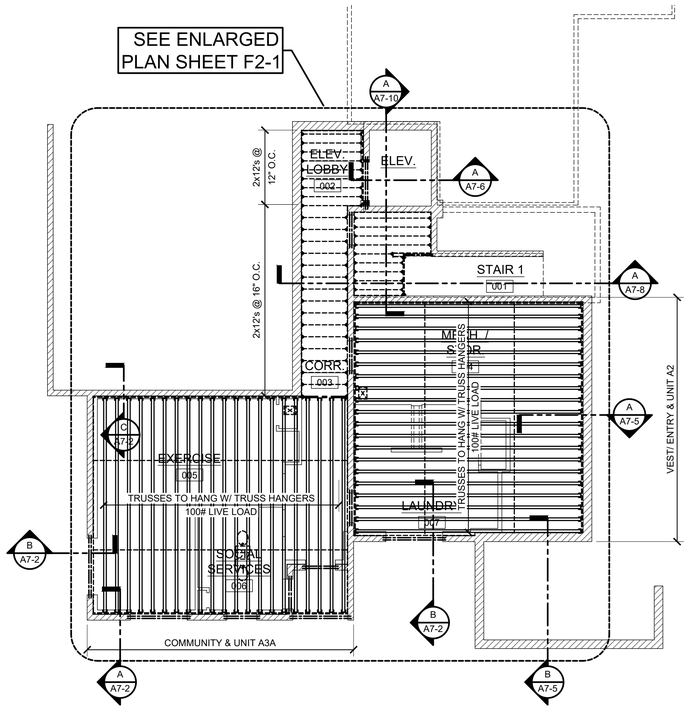
## HEADER & BEAM SCHEDULE

1. EXTERIOR WALL - 3'-0" & 3'-4" OPENINGS - (3) 2x8's W/ (2) 1/2" PLYWOOD CONT. FLITCH PLATES (SOLID HEADER)
2. EXTERIOR WALL - 6'-0" & 8'-0" OPENINGS - (3) 1 3/4" x 7 1/4" ML's W/ (1) 1/4" PLYWOOD CONT. FLITCH PLATE (SOLID HEADER)
3. PORCH BEAMS - (2) 1 3/4" x 5 1/2" ML's
4. (3) 1 3/4" x 7 1/4" ML's W/ (1) 1/4" PLYWOOD CONT. FLITCH PLATE (SOLID HEADER)
5. (3) 1 3/4" x 9 1/4" 2.0E ML's W/ (1) 1/4" PLYWOOD CONT. FLITCH PLATE (SOLID HEADER) COLUMN TO HAVE (2) KING 2x6 STUDS & (1) 2x6 JACK EACH SIDE. INSTALL HEADER TIGHT TO DOUBLE TOP PLATE. INSTALL BLOCKING AT CEILING LINE. (10'-1 1/8" FULL HGT. WALL)
6. (3) 1 3/4" x 11 1/4" 2.0E ML's W/ (1) 1/4" PLYWOOD CONT. FLITCH PLATE (SOLID HEADER) SET 2x6 JACK STUD AT EACH END WITH INTERMEDIATE POSTS. INSTALL HEADER TIGHT TO DOUBLE TOP PLATE. INSTALL BLOCKING AT CEILING LINE. (10'-1 1/8" FULL HGT. WALL)
7. (3) 1 3/4" x 14" 2.0E ML's W/ (1) 1/4" PLYWOOD CONT. FLITCH PLATE (SOLID HEADER) INSTALL (2) 2x6 JACK STUDS AT EACH END. INSTALL HEADER TIGHT TO DOUBLE TOP PLATE. INSTALL BLOCKING AT CEILING LINE. (10'-1 1/8" FULL HGT. WALL)
8. STAIR WALLS - (3) 2x8's W/ (2) 5/8" PLYWOOD CONT. FLITCH PLATES (SOLID HEADER)




## 2ND FL. FLOOR FRAMING PLAN

SCALE: 1/8" = 1'-0"




## 1ST FL. FLOOR FRAMING PLAN

SCALE: 1/8" = 1'-0"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PROJECT:
TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:
BUILDING FLOOR FRAMING PLANS

GEORGE KONTOGIANNIS REGISTERED No. AR00034309 STATE OF INDIANA ARCHITECT

DATE: 06/26/2026
REVISED:


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EXPIRATION DATE 12/31/2027
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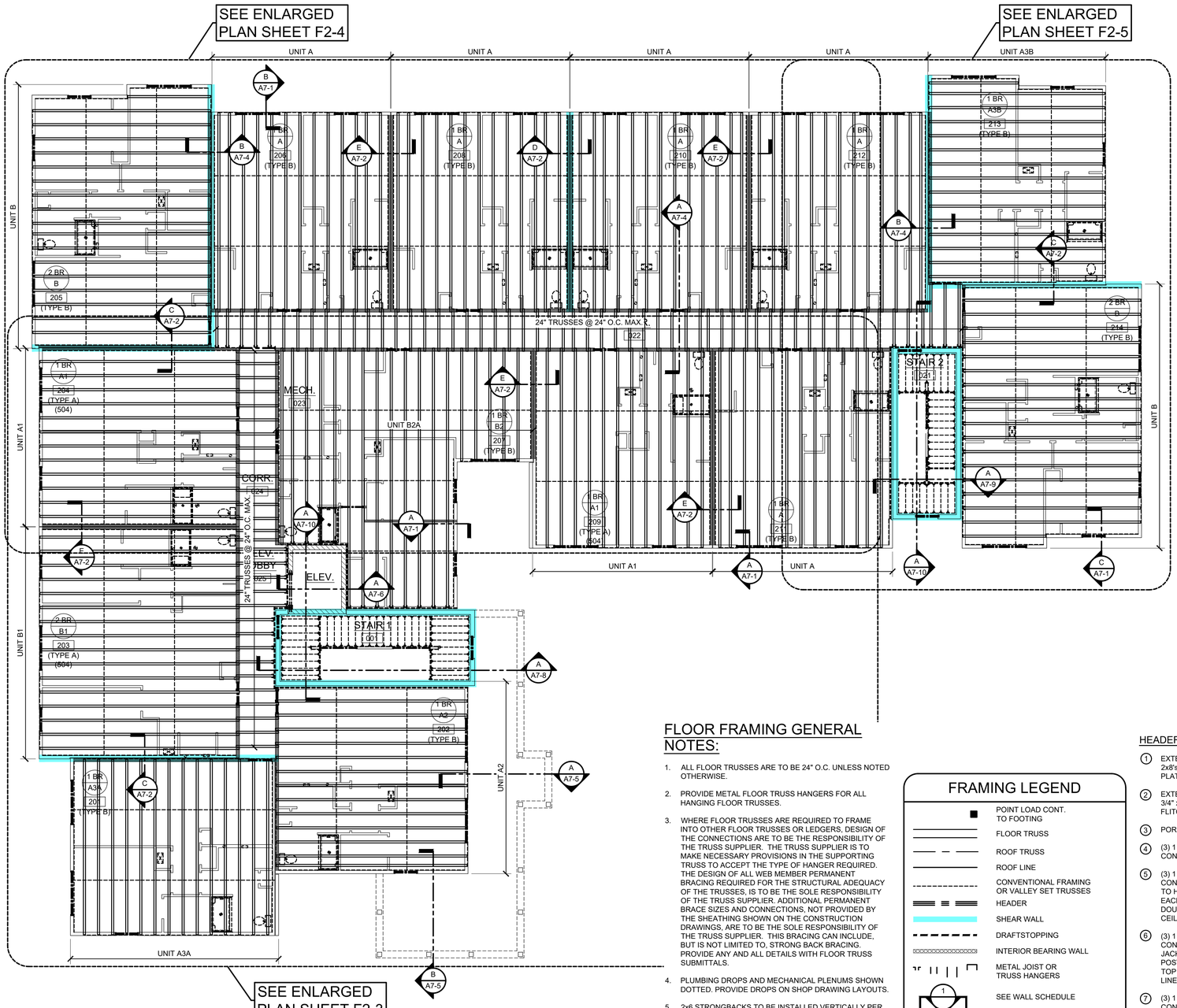


# 3RD FL. FLOOR FRAMING PLAN

SCALE: 1/8" = 1'-0"

## FLOOR FRAMING GENERAL NOTES:

1. ALL FLOOR TRUSSES ARE TO BE 24" O.C. UNLESS NOTED OTHERWISE.
2. PROVIDE METAL FLOOR TRUSS HANGERS FOR ALL HANGING FLOOR TRUSSES.
3. WHERE FLOOR TRUSSES ARE REQUIRED TO FRAME INTO OTHER FLOOR TRUSSES OR LEDGERS, DESIGN OF THE CONNECTIONS ARE TO BE THE RESPONSIBILITY OF THE TRUSS SUPPLIER. THE TRUSS SUPPLIER IS TO MAKE NECESSARY PROVISIONS IN THE SUPPORTING TRUSS TO ACCEPT THE TYPE OF HANGER REQUIRED. THE DESIGN OF ALL WEB MEMBER PERMANENT BRACING REQUIRED FOR THE STRUCTURAL ADEQUACY OF THE TRUSSES, IS TO BE THE SOLE RESPONSIBILITY OF THE TRUSS SUPPLIER. ADDITIONAL PERMANENT BRACE SIZES AND CONNECTIONS, NOT PROVIDED BY THE SHEATHING SHOWN ON THE CONSTRUCTION DRAWINGS, ARE TO BE THE SOLE RESPONSIBILITY OF THE TRUSS SUPPLIER. THIS BRACING CAN INCLUDE, BUT IS NOT LIMITED TO, STRONG BACK BRACING. PROVIDE ANY AND ALL DETAILS WITH FLOOR TRUSS SUBMITTALS.
4. PLUMBING DROPS AND MECHANICAL PLENUMS SHOWN DOTTED. PROVIDE DROPS ON SHOP DRAWING LAYOUTS.
5. 2x6 STRONGBACKS TO BE INSTALLED VERTICALLY PER THE SHOP DRAWING DETAILS AT THE TOP OR BOTTOM OF TRUSSES SPACED AT MAX. 10'-0" APART.

## FRAMING LEGEND

- POINT LOAD CONT. TO FOOTING
- FLOOR TRUSS
- ROOF TRUSS
- ROOF LINE
- CONVENTIONAL FRAMING OR VALLEY SET TRUSSES
- HEADER
- SHEAR WALL
- DRAFTSTOPPING
- INTERIOR BEARING WALL
- METAL JOIST OR TRUSS HANGERS
- SEE WALL SCHEDULE
- SIMPSON HOLD DOWNS
- (1) HEATING PLENUM, (2) DRYER DUCT, (3) PLUMBING DROPS & (4) WASHER BOX

## HEADER & BEAM SCHEDULE

1. EXTERIOR WALL - 3'-0" & 3'-4" OPENINGS - (3) 2x8's W/ (2) 1/2" PLYWOOD CONT. FLITCH PLATES (SOLID HEADER)
2. EXTERIOR WALL - 6'-0" & 8'-0" OPENINGS - (3) 1 3/4" x 7 1/4" ML's W/ (1) 1/4" PLYWOOD CONT. FLITCH PLATE (SOLID HEADER)
3. PORCH BEAMS - (2) 1 3/4" x 5 1/2" ML's
4. (3) 1 3/4" x 7 1/4" ML's W/ (1) 1/4" PLYWOOD CONT. FLITCH PLATE (SOLID HEADER)
5. (3) 1 3/4" x 9 1/4" 2.0E ML's W/ (1) 1/4" PLYWOOD CONT. FLITCH PLATE (SOLID HEADER) COLUMN TO HAVE (2) KING 2x6 STUDS & (1) 2x6 JACK EACH SIDE. INSTALL HEADER TIGHT TO DOUBLE TOP PLATE. INSTALL BLOCKING AT CEILING LINE. (10'-1 1/8" FULL HGT. WALL)
6. (3) 1 3/4" x 11 1/4" 2.0E ML's W/ (1) 1/4" PLYWOOD CONT. FLITCH PLATE (SOLID HEADER) SET 2x6 JACK STUD AT EACH END WITH INTERMEDIATE POSTS. INSTALL HEADER TIGHT TO DOUBLE TOP PLATE. INSTALL BLOCKING AT CEILING LINE. (10'-1 1/8" FULL HGT. WALL)
7. (3) 1 3/4" x 14" 2.0E ML's W/ (1) 1/4" PLYWOOD CONT. FLITCH PLATE (SOLID HEADER) INSTALL (2) 2x6 JACK STUDS AT EACH END. INSTALL HEADER TIGHT TO DOUBLE TOP PLATE. INSTALL BLOCKING AT CEILING LINE. (10'-1 1/8" FULL HGT. WALL)
8. STAIR WALLS - (3) 2x8's W/ (2) 5/8" PLYWOOD CONT. FLITCH PLATES (SOLID HEADER)


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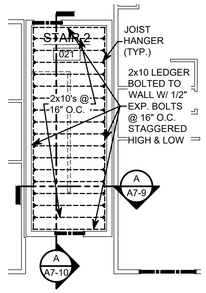
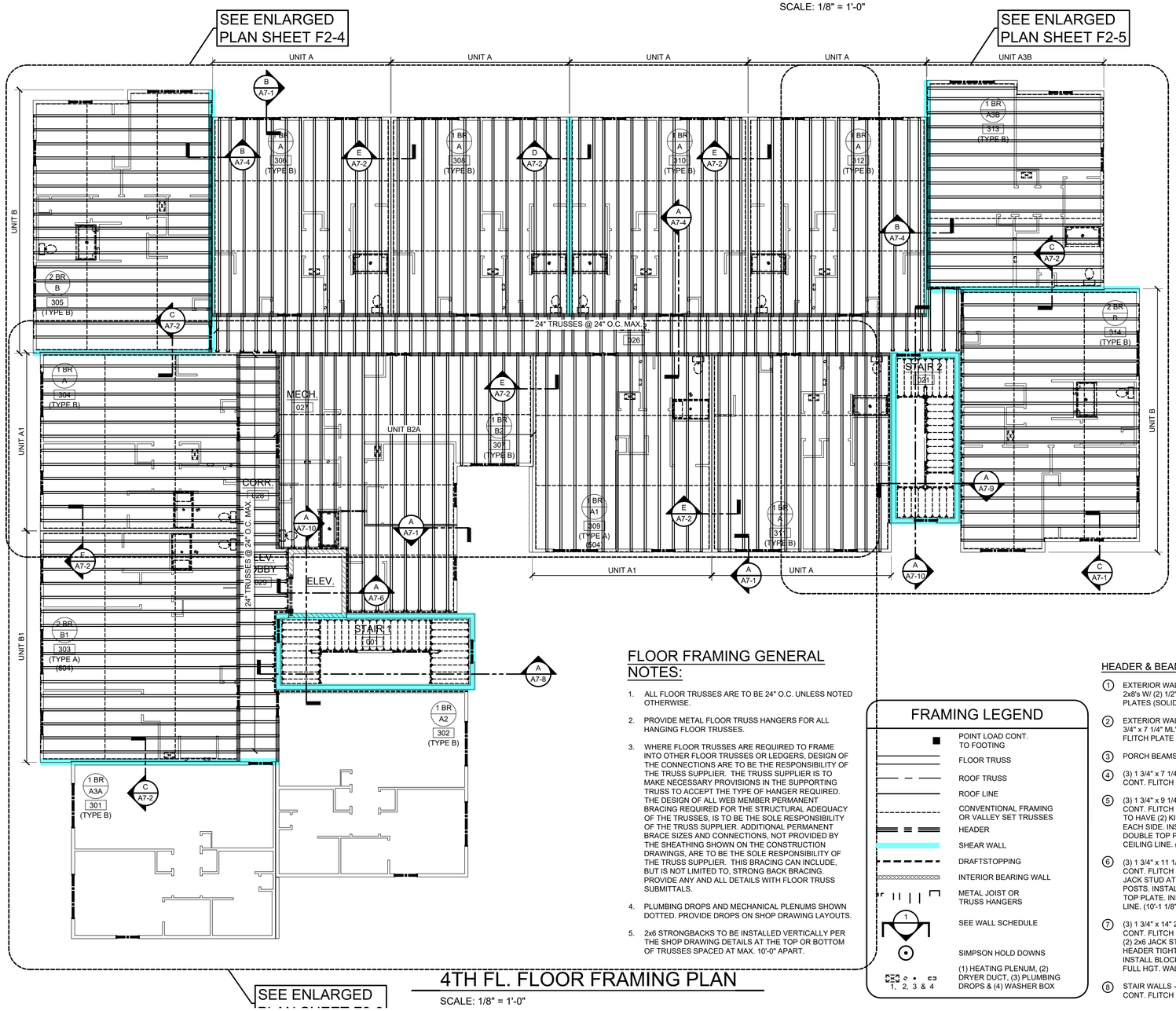


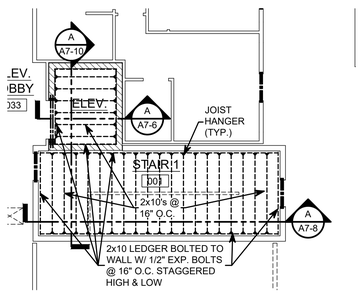

## FRAMING @ TOP OF STAIR 2

SCALE: 1/8" = 1'-0"




## FRAMING AT TOP OF STAIR 1 & ELEVATOR

SCALE: 1/8" = 1'-0"




## FLOOR FRAMING GENERAL NOTES:

1. ALL FLOOR TRUSSES ARE TO BE 24" O.C. UNLESS NOTED OTHERWISE.
2. PROVIDE METAL FLOOR TRUSS HANGERS FOR ALL HANGING FLOOR TRUSSES.
3. WHERE FLOOR TRUSSES ARE REQUIRED TO FRAME INTO OTHER FLOOR TRUSSES OR LEDGERS, DESIGN OF THE CONNECTIONS ARE TO BE THE RESPONSIBILITY OF THE TRUSS SUPPLIER. THE TRUSS SUPPLIER IS TO MAKE NECESSARY PROVISIONS IN THE SUPPORTING TRUSS TO ACCEPT THE TYPE OF HANGER REQUIRED. THE DESIGN OF ALL WEB MEMBER PERMANENT BRACING REQUIRED FOR THE STRUCTURAL ADEQUACY OF THE TRUSSES, IS TO BE THE SOLE RESPONSIBILITY OF THE TRUSS SUPPLIER. ADDITIONAL PERMANENT BRACE SIZES AND CONNECTIONS, NOT PROVIDED BY THE SHEATHING SHOWN ON THE CONSTRUCTION DRAWINGS, ARE TO BE THE SOLE RESPONSIBILITY OF THE TRUSS SUPPLIER. THIS BRACING CAN INCLUDE, BUT IS NOT LIMITED TO, STRONG BACK BRACING. PROVIDE ANY AND ALL DETAILS WITH FLOOR TRUSS SUBMITTALS.
4. PLUMBING DROPS AND MECHANICAL PLENUMS SHOWN DOTTED. PROVIDE DROPS ON SHOP DRAWING LAYOUTS.
5. 2x6 STRONGBACKS TO BE INSTALLED VERTICALLY PER THE SHOP DRAWING DETAILS AT THE TOP OR BOTTOM OF TRUSSES SPACED AT MAX. 10'-0" APART.

## FRAMING LEGEND

- POINT LOAD CONT. TO FOOTING
- FLOOR TRUSS
- ROOF TRUSS
- ROOF LINE
- CONVENTIONAL FRAMING OR VALLEY SET TRUSSES
- HEADER
- SHEAR WALL
- DRAFTSTOPPING
- INTERIOR BEARING WALL
- METAL JOIST OR TRUSS HANGERS
- SEE WALL SCHEDULE
- SIMPSON HOLD DOWNS
- (1) HEATING PLENUM, (2) DRYER DUCT, (3) PLUMBING DROPS & (4) WASHER BOX

## HEADER & BEAM SCHEDULE

1. EXTERIOR WALL - 3'-0" & 3'-4" OPENINGS - (3) 2x8's W/ (2) 1/2" PLYWOOD CONT. FLITCH PLATES (SOLID HEADER)
2. EXTERIOR WALL - 6'-0" & 8'-0" OPENINGS - (3) 1 3/4" x 7 1/4" ML's W/ (1) 1/4" PLYWOOD CONT. FLITCH PLATE (SOLID HEADER)
3. PORCH BEAMS - (2) 1 3/4" x 5 1/2" ML's
4. (3) 1 3/4" x 7 1/4" ML's W/ (1) 1/4" PLYWOOD CONT. FLITCH PLATE (SOLID HEADER)
5. (3) 1 3/4" x 9 1/4" 2.0E ML's W/ (1) 1/4" PLYWOOD CONT. FLITCH PLATE (SOLID HEADER) COLUMN TO HAVE (2) KING 2x6 STUDS & (1) 2x6 JACK EACH SIDE. INSTALL HEADER TIGHT TO DOUBLE TOP PLATE. INSTALL BLOCKING AT CEILING LINE. (10'-1 1/8" FULL HGT. WALL)
6. (3) 1 3/4" x 11 1/4" 2.0E ML's W/ (1) 1/4" PLYWOOD CONT. FLITCH PLATE (SOLID HEADER) SET 2x6 JACK STUD AT EACH END WITH INTERMEDIATE POSTS. INSTALL HEADER TIGHT TO DOUBLE TOP PLATE. INSTALL BLOCKING AT CEILING LINE. (10'-1 1/8" FULL HGT. WALL)
7. (3) 1 3/4" x 14" 2.0E ML's W/ (1) 1/4" PLYWOOD CONT. FLITCH PLATE (SOLID HEADER) INSTALL (2) 2x6 JACK STUDS AT EACH END. INSTALL HEADER TIGHT TO DOUBLE TOP PLATE. INSTALL BLOCKING AT CEILING LINE. (10'-1 1/8" FULL HGT. WALL)
8. STAIR WALLS - (3) 2x8's W/ (2) 5/8" PLYWOOD CONT. FLITCH PLATES (SOLID HEADER)

SEE ENLARGED PLAN SHEET F2-3

## 4TH FL. FLOOR FRAMING PLAN

SCALE: 1/8" = 1'-0"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PROJECT:

TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

BUILDING FLOOR FRAMING PLAN

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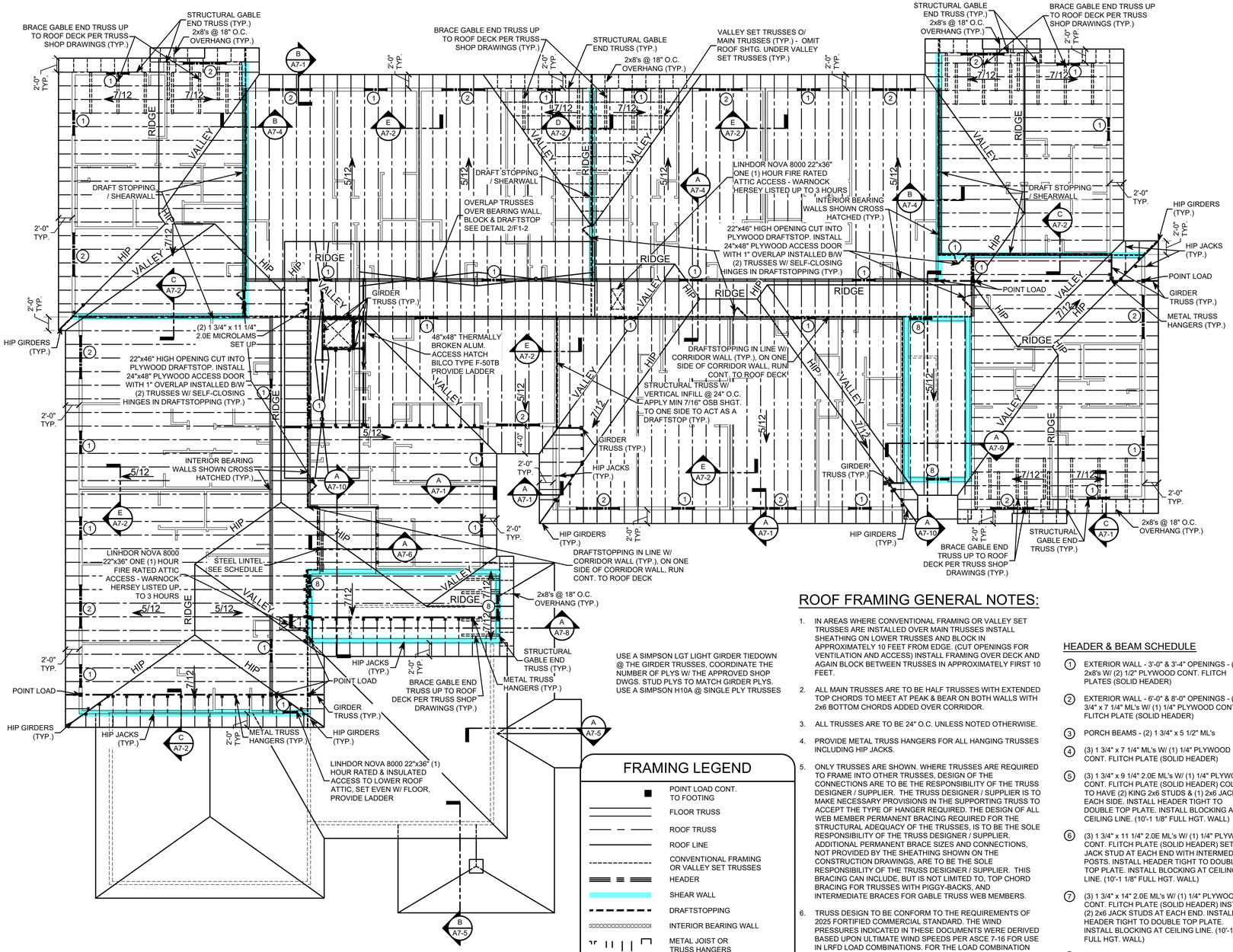



USE A SIMPSON LGT LIGHT GIRDER TIEDOWN @ THE GIRDER TRUSSES, COORDINATE THE NUMBER OF PLYS W/ THE APPROVED SHOP DWGS. STUD PLYS TO MATCH GIRDER PLYS. USE A SIMPSON H10A @ SINGLE PLY TRUSSES

## FRAMING LEGEND

- POINT LOAD CONT. TO FOOTING
- FLOOR TRUSS
- ROOF TRUSS
- ROOF LINE
- CONVENTIONAL FRAMING OR VALLEY SET TRUSSES
- HEADER
- SHEAR WALL
- DRAFTSTOPPING
- INTERIOR BEARING WALL
- METAL JOIST OR TRUSS HANGERS
- SEE WALL SCHEDULE
- SIMPSON HOLD DOWNS
- (1) HEATING PLENUM, (2) DRYER DUCT, (3) PLUMBING DROPS & (4) WASHER BOX

## ROOF FRAMING PLAN

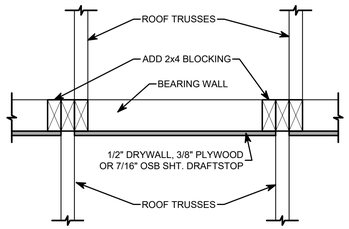
SCALE: 1/8" = 1'-0"

## ROOF FRAMING GENERAL NOTES:

1. IN AREAS WHERE CONVENTIONAL FRAMING OR VALLEY SET TRUSSES ARE INSTALLED OVER MAIN TRUSSES INSTALL SHEATHING ON LOWER TRUSSES AND BLOCK IN APPROXIMATELY 10 FEET FROM EDGE. (CUT OPENINGS FOR VENTILATION AND ACCESS) INSTALL FRAMING OVER DECK AND AGAIN BLOCK BETWEEN TRUSSES IN APPROXIMATELY FIRST 10 FEET.
2. ALL MAIN TRUSSES ARE TO BE HALF TRUSSES WITH EXTENDED TOP CHORDS TO MEET AT PEAK & BEAR ON BOTH WALLS WITH 2x6 BOTTOM CHORDS ADDED OVER CORRIDOR.
3. ALL TRUSSES ARE TO BE 24" O.C. UNLESS NOTED OTHERWISE.
4. PROVIDE METAL TRUSS HANGERS FOR ALL HANGING TRUSSES INCLUDING HIP JACKS.
5. ONLY TRUSSES ARE SHOWN. WHERE TRUSSES ARE REQUIRED TO FRAME INTO OTHER TRUSSES, DESIGN OF THE CONNECTIONS ARE TO BE THE RESPONSIBILITY OF THE TRUSS DESIGNER / SUPPLIER. THE TRUSS DESIGNER / SUPPLIER IS TO MAKE NECESSARY PROVISIONS IN THE SUPPORTING TRUSS TO ACCEPT THE TYPE OF HANGER REQUIRED. THE DESIGN OF ALL WEB MEMBER PERMANENT BRACING REQUIRED FOR THE STRUCTURAL ADEQUACY OF THE TRUSSES, IS TO BE THE SOLE RESPONSIBILITY OF THE TRUSS DESIGNER / SUPPLIER. ADDITIONAL PERMANENT BRACE SIZES AND CONNECTIONS, NOT PROVIDED BY THE SHEATHING SHOWN ON THE CONSTRUCTION DRAWINGS, ARE TO BE THE SOLE RESPONSIBILITY OF THE TRUSS DESIGNER / SUPPLIER. THIS BRACING CAN INCLUDE, BUT IS NOT LIMITED TO, TOP CHORD BRACING FOR TRUSSES WITH PIGGY-BACKS, AND INTERMEDIATE BRACES FOR GABLE TRUSS WEB MEMBERS.
6. TRUSS DESIGN TO BE CONFORM TO THE REQUIREMENTS OF 2025 FORTIFIED COMMERCIAL STANDARD. THE WIND PRESSURES INDICATED IN THESE DOCUMENTS WERE DERIVED BASED UPON ULTIMATE WIND SPEEDS PER ASCE 7-16 FOR USE IN LRFD LOAD COMBINATIONS. FOR THE LOAD COMBINATION 0.9D + 1.0W, THE DEAD LOAD (D) SHALL BE 8.0 PSF.
7. ROOF CONSTRUCTION SHALL CONSIST OF 7/16" APA SPAN RATED SHEATHING (24/16), EXPOSURE 1, STRUCTURAL 1, NAILING TO BE 8D RING SHANK NAILS WITH A .131" DIAMETER AND A LENGTH OF 2 3/8". NAILS MUST HAVE NON-CLIPPED, ROUND OR OFFSET ROUND HEADS. SPACE NAILS IN UNBLOCKED AREAS OF THE ROOF WITH A PERIMETER AND FIELD SPACING OF 4". IN BLOCKED AREAS OF THE ROOF, PROVIDE PERIMETER SPACING OF 3" AND FIELD SPACING OF 4".

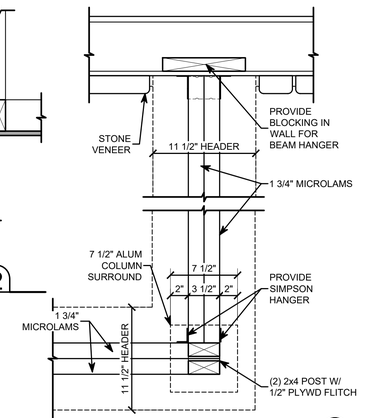
## HEADER & BEAM SCHEDULE

1. EXTERIOR WALL - 3'-0" & 3'-4" OPENINGS - (3) 2x8's W/ (2) 1/2" PLYWOOD CONT. FLITCH PLATES (SOLID HEADER)
2. EXTERIOR WALL - 6'-0" & 8'-0" OPENINGS - (3) 1 3/4" x 7 1/4" ML's W/ (1) 1/4" PLYWOOD CONT. FLITCH PLATE (SOLID HEADER)
3. PORCH BEAMS - (2) 1 3/4" x 5 1/2" ML's
4. (3) 1 3/4" x 7 1/4" ML's W/ (1) 1/4" PLYWOOD CONT. FLITCH PLATE (SOLID HEADER)
5. (3) 1 3/4" x 9 1/4" 2.0E ML's W/ (1) 1/4" PLYWOOD CONT. FLITCH PLATE (SOLID HEADER) COLUMN TO HAVE (2) KING 2x6 STUDS & (1) 2x6 JACK EACH SIDE. INSTALL HEADER TIGHT TO DOUBLE TOP PLATE. INSTALL BLOCKING AT CEILING LINE. (10'-1 1/8" FULL HGT. WALL)
6. (3) 1 3/4" x 11 1/4" 2.0E ML's W/ (1) 1/4" PLYWOOD CONT. FLITCH PLATE (SOLID HEADER) SET 2x6 JACK STUD AT EACH END WITH INTERMEDIATE POSTS. INSTALL HEADER TIGHT TO DOUBLE TOP PLATE. INSTALL BLOCKING AT CEILING LINE. (10'-1 1/8" FULL HGT. WALL)
7. (3) 1 3/4" x 14" 2.0E ML's W/ (1) 1/4" PLYWOOD CONT. FLITCH PLATE (SOLID HEADER) INSTALL (2) 2x6 JACK STUDS AT EACH END. INSTALL HEADER TIGHT TO DOUBLE TOP PLATE. INSTALL BLOCKING AT CEILING LINE. (10'-1 1/8" FULL HGT. WALL)
8. STAIR WALLS - (3) 2x8's W/ (2) 5/8" PLYWOOD CONT. FLITCH PLATES (SOLID HEADER)



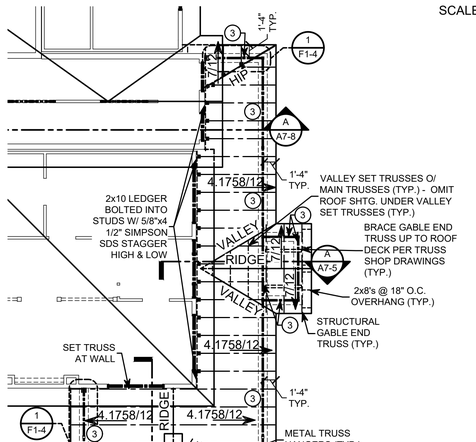

## DRAFTSTOPPING PLAN DETAIL 2

SCALE: 1 1/2" = 1'-0"




## PORCH FRAMING DETAIL 1

SCALE: 1 1/2" = 1'-0"

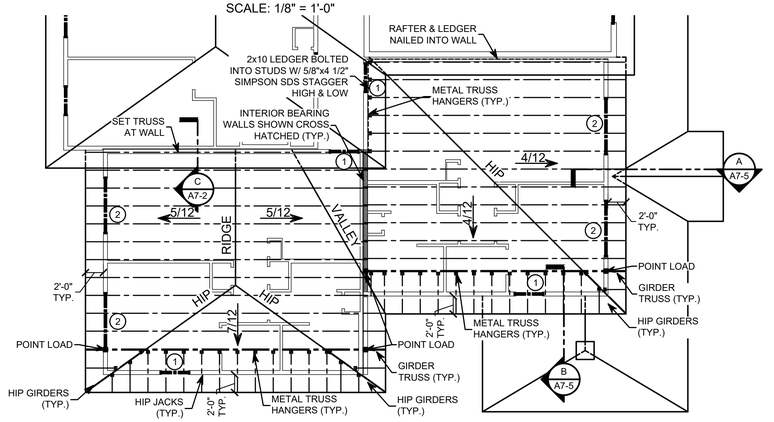






## 1ST FL. ROOF FRAMING PLANS

SCALE: 1/8" = 1'-0"




## 3RD FL. ROOF FRAMING PLAN

SCALE: 1/8" = 1'-0"

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F1-4

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## WALL FRAMING SCHEDULE

**1 / F1-5** — EXTERIOR LOAD BEARING WALL - SEE DETAIL A & B/F3-2

| | |
|---|---|
| 1ST FLOOR | 2x6's @ 12" O.C. (BALLOON FRAME - 10'-1 1/8") DOUBLE STUD UNDER FLOOR TRUSSES |
| 2ND FLOOR | 2x6's @ 12" O.C. DOUBLE STUD UNDER FLOOR TRUSSES |
| 3RD FLOOR | 2x6's @ 12" O.C. - ALIGN UNDER FLOOR TRUSSES |
| 4TH FLOOR | 2x6's @ 16" O.C. |

**2 / F1-5** — EXTERIOR WALLS NOT SUPPORTING FLOOR TRUSSES

| | |
|---|---|
| 1ST THRU 4TH FLOOR | 2x6's @ 16" O.C (BALLOON FRAME 1ST. FL.) (8'-1 1/8" WALL W/ 2'-0" LADDER TRUSS 2ND-4TH) |

**3 / F1-5** — INTERIOR CORRIDOR & BEARING WALL - SEE DETAIL C/F3-2

| | |
|---|---|
| 1ST FLOOR | 2x6's @ 12" O.C. (BALLOON FRAME 1ST. FL.) DOUBLE STUD UNDER FLOOR TRUSSES |
| 2ND FLOOR | 2x6's @ 12" O.C. DOUBLE STUD UNDER FLOOR TRUSSES |
| 3RD FLOOR | 2x6's @ 12" O.C. - ALIGN UNDER FLOOR TRUSSES |
| 4TH FLOOR | 2x6's @ 16" O.C |

**4 / F1-5** — INTERIOR TENANT SEPARATION WALL

| | |
|---|---|
| 1ST THRU 4TH FLOOR | DOUBLE 2x4 STUD WALL WITH 1" AIR SPACE SPACE @ 16" O.C. BALLOON FRAME 1ST, 2ND & 3RD FL. 10'-1 1/8". 4TH FLOOR 8'-1 1/8" |

**5 / F1-5** — INTERIOR TENANT SEPARATION SHEAR WALL

| | |
|---|---|
| 1ST THRU 4TH FLOOR | DOUBLE 2x4 STUD WALL WITH 1" AIR SPACE SPACE @ 16" O.C. WITH 5/8" PLYWOOD INSTALLED IN AIR SPACE. BALLOON FRAME 1ST, 2ND & 3RD FL. 10'-1 1/8". 4TH FLOOR 8'-1 1/8" |

**6 / F1-5** — INTERIOR TENANT SEPARATION SHEARWALL WALL BEARING ON ONE SIDE

| | |
|---|---|
| 1ST FLOOR | 2x6's @ 12" O.C. DOUBLE STUD UNDER FLOOR TRUSSES. BALLOON FRAME 10'-1 1/8" W/ 7/16" OSB |
| 2ND & 3RD FLOOR | 2x6's @ 12" O.C STUDS TO FALL UNDER FLOOR TRUSSES. BALLOON FRAME 10'-1 1/8" W/ 7/16" OSB |
| 4TH FLOOR | 2x6's @ 16" O.C W/ 5/8" PLYWOOD IN AIR SPACE |

**7 / F1-5** — STAIR SHEARWALLS SEE DETAIL 1/F3-2

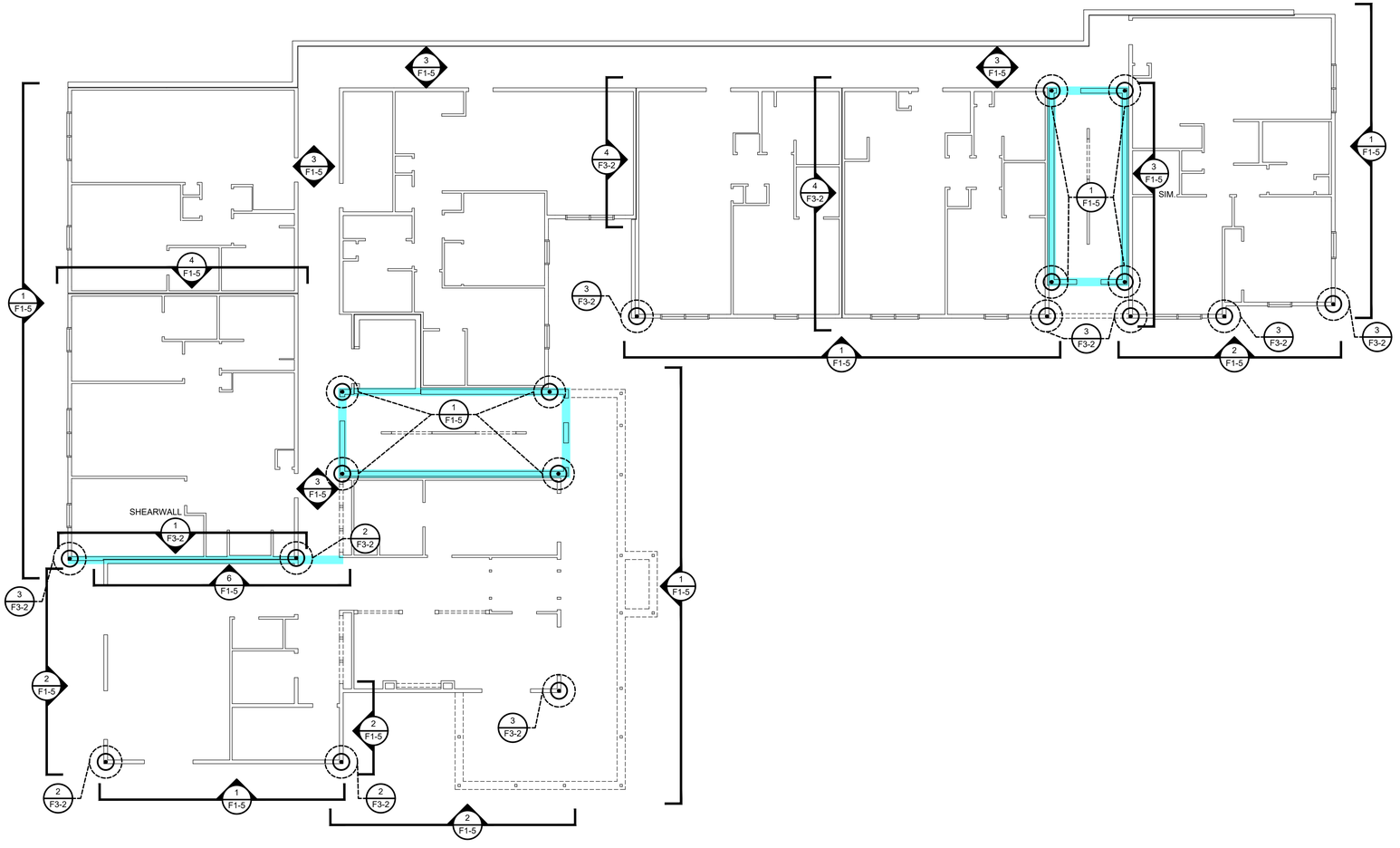
| | |
|---|---|
| 1ST-4TH FLOOR | 2x8's @ 16" O.C. W/ 2 LAYERS 5/8" FIRECODE DRYWALL OVER 5/8" T&G PLYWOOD EACH SIDE. NAIL PLYWOOD @ 6" O.C. IN FIELD & 4" O.C. ON EDGES W/ 10D NAILS (TWO (2) HOUR RATING PER UL U301) |

**8 / F1-5** — STAIR EXTERIOR SHEARWALLS

| | |
|---|---|
| 1ST-4TH FLOOR | 2x8's @ 16" O.C. W/ 2 LAYERS 5/8" FIRECODE DRYWALL ON INTERIOR FACE (FIRE SIDE) PER UL U349 W/ 7/16" OSB EXTERIOR SHEATHING. |

## FRAMING LEGEND

- POINT LOAD CONT. TO FOOTING
- FLOOR TRUSS
- ROOF TRUSS
- ROOF LINE
- CONVENTIONAL FRAMING OR VALLEY SET TRUSSES
- HEADER
- SHEAR WALL
- DRAFTSTOPPING
- INTERIOR BEARING WALL
- METAL JOIST OR TRUSS HANGERS
- SEE WALL SCHEDULE
- SIMPSON HOLD DOWNS
- (1) HEATING PLENUM, (2) DRYER DUCT, (3) PLUMBING DROPS & (4) WASHER BOX (1, 2, 3 & 4)




FIRST FLOOR PLAN

SCALE: 1/8" = 1'-0"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PROJECT:

TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

HOLD-DOWN, SHEARWALL & STUD SCHEDULE PLAN

DATE: 06/26/2026
REVISED:

GEORGE J. KONTOGIANNIS REGISTERED No. AR00034309 STATE OF INDIANA ARCHITECT

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## WALL FRAMING SCHEDULE

**1 / F1-5** — EXTERIOR LOAD BEARING WALL - SEE DETAIL A & B/F3-2

| | |
|---|---|
| 1ST FLOOR | 2x6's @ 12" O.C. (BALLOON FRAME - 10'-1 1/8") DOUBLE STUD UNDER FLOOR TRUSSES |
| 2ND FLOOR | 2x6's @ 12" O.C. DOUBLE STUD UNDER FLOOR TRUSSES |
| 3RD FLOOR | 2x6's @ 12" O.C. - ALIGN UNDER FLOOR TRUSSES |
| 4TH FLOOR | 2x6's @ 16" O.C. |

**2 / F1-5** — EXTERIOR WALLS NOT SUPPORTING FLOOR TRUSSES

| | |
|---|---|
| 1ST THRU 4TH FLOOR | 2x6's @ 16" O.C (BALLOON FRAME 1ST. FL.) (8'-1 1/8" WALL W/ 2'-0" LADDER TRUSS 2ND-4TH) |

**3 / F1-5** — INTERIOR CORRIDOR & BEARING WALL - SEE DETAIL C/F3-2

| | |
|---|---|
| 1ST FLOOR | 2x6's @ 12" O.C. (BALLOON FRAME 1ST. FL.) DOUBLE STUD UNDER FLOOR TRUSSES |
| 2ND FLOOR | 2x6's @ 12" O.C. DOUBLE STUD UNDER FLOOR TRUSSES |
| 3RD FLOOR | 2x6's @ 12" O.C. - ALIGN UNDER FLOOR TRUSSES |
| 4TH FLOOR | 2x6's @ 16" O.C |

**4 / F1-5** — INTERIOR TENANT SEPARATION WALL

| | |
|---|---|
| 1ST THRU 4TH FLOOR | DOUBLE 2x4 STUD WALL WITH 1" AIR SPACE SPACE @ 16" O.C. BALLOON FRAME 1ST, 2ND & 3RD FL. 10'-1 1/8". 4TH FLOOR 8'-1 1/8" |

**5 / F1-5** — INTERIOR TENANT SEPARATION SHEAR WALL

| | |
|---|---|
| 1ST THRU 4TH FLOOR | DOUBLE 2x4 STUD WALL WITH 1" AIR SPACE SPACE @ 16" O.C. WITH 5/8" PLYWOOD INSTALLED IN AIR SPACE. BALLOON FRAME 1ST, 2ND & 3RD FL. 10'-1 1/8". 4TH FLOOR 8'-1 1/8" |

**6 / F1-5** — INTERIOR TENANT SEPARATION SHEARWALL WALL BEARING ON ONE SIDE

| | |
|---|---|
| 1ST FLOOR | 2x6's @ 12" O.C. DOUBLE STUD UNDER FLOOR TRUSSES. BALLOON FRAME 10'-1 1/8" W/ 7/16" OSB |
| 2ND & 3RD FLOOR | 2x6's @ 12" O.C STUDS TO FALL UNDER FLOOR TRUSSES. BALLOON FRAME 10'-1 1/8" W/ 7/16" OSB |
| 4TH FLOOR | 2x6's @ 16" O.C W/ 5/8" PLYWOOD IN AIR SPACE |

**7 / F1-5** — STAIR SHEARWALLS SEE DETAIL 1/F3-2

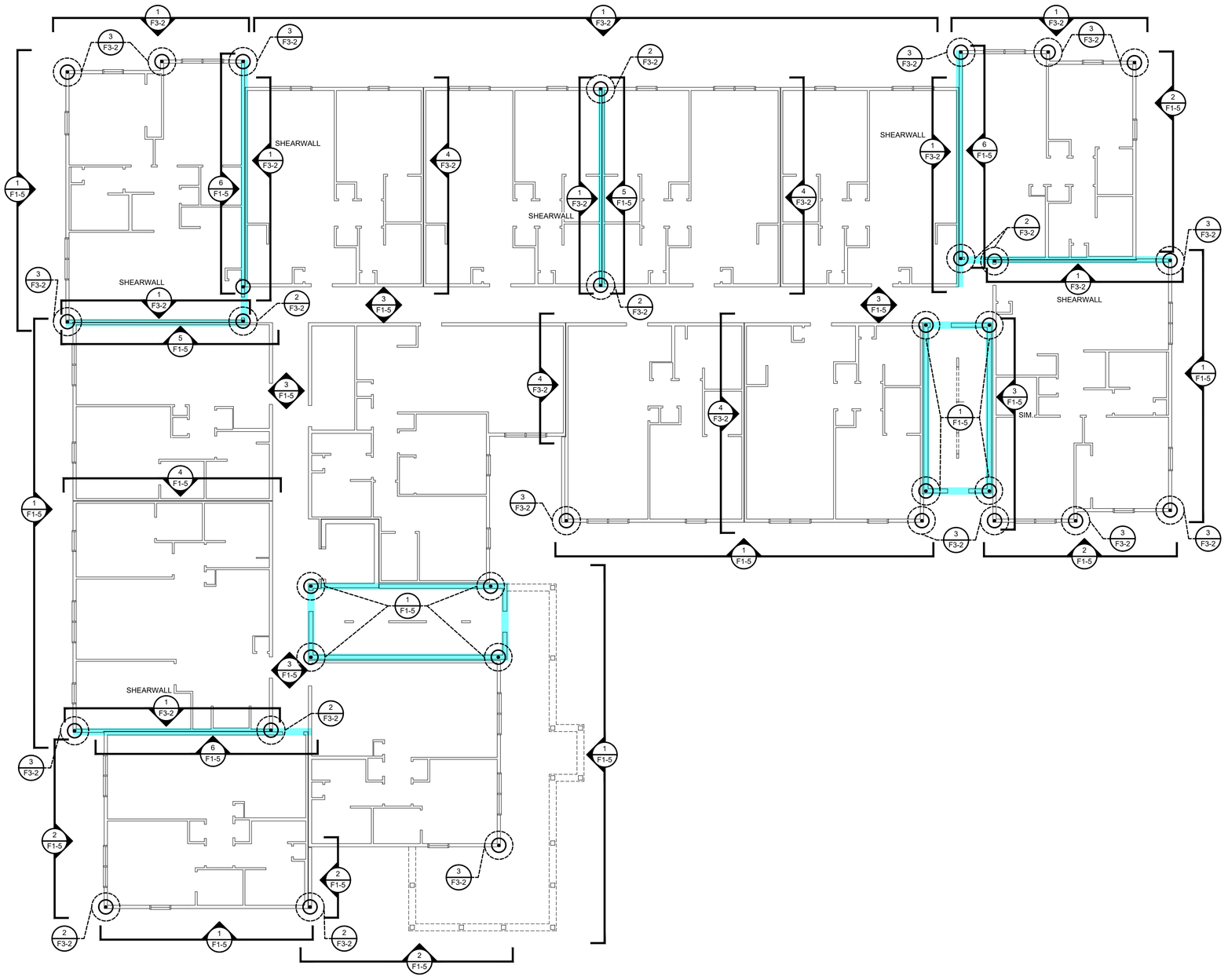
| | |
|---|---|
| 1ST-4TH FLOOR | 2x8's @ 16" O.C. W/ 2 LAYERS 5/8" FIRECODE DRYWALL OVER 5/8" T&G PLYWOOD EACH SIDE. NAIL PLYWOOD @ 6" O.C. IN FIELD & 4" O.C. ON EDGES W/ 10D NAILS (TWO (2) HOUR RATING PER UL U301) |

**8 / F1-5** — STAIR EXTERIOR SHEARWALLS

| | |
|---|---|
| 1ST-4TH FLOOR | 2x8's @ 16" O.C. W/ 2 LAYERS 5/8" FIRECODE DRYWALL ON INTERIOR FACE (FIRE SIDE) PER UL U349 W/ 7/16" OSB EXTERIOR SHEATHING. |

## FRAMING LEGEND

- POINT LOAD CONT. TO FOOTING
- FLOOR TRUSS
- ROOF TRUSS
- ROOF LINE
- CONVENTIONAL FRAMING OR VALLEY SET TRUSSES
- HEADER
- SHEAR WALL
- DRAFTSTOPPING
- INTERIOR BEARING WALL
- METAL JOIST OR TRUSS HANGERS
- SEE WALL SCHEDULE
- SIMPSON HOLD DOWNS
- (1) HEATING PLENUM, (2) DRYER DUCT, (3) PLUMBING DROPS & (4) WASHER BOX (1, 2, 3 & 4)




## SECOND FLOOR PLAN

SCALE: 1/8" = 1'-0"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DESIGN

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PROJECT:

TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

HOLD-DOWN, SHEARWALL & STUD SCHEDULE PLAN

DATE: 06/26/2026
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GEORGE J. KONTOGIANNIS REGISTERED No. AR00034309 STATE OF INDIANA ARCHITECT

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## WALL FRAMING SCHEDULE

**1 / F1-5** — EXTERIOR LOAD BEARING WALL - SEE DETAIL A & B/F3-2

| | |
|---|---|
| 1ST FLOOR | 2x6's @ 12" O.C. (BALLOON FRAME - 10'-1 1/8") DOUBLE STUD UNDER FLOOR TRUSSES |
| 2ND FLOOR | 2x6's @ 12" O.C. DOUBLE STUD UNDER FLOOR TRUSSES |
| 3RD FLOOR | 2x6's @ 12" O.C. - ALIGN UNDER FLOOR TRUSSES |
| 4TH FLOOR | 2x6's @ 16" O.C. |

**2 / F1-5** — EXTERIOR WALLS NOT SUPPORTING FLOOR TRUSSES

| | |
|---|---|
| 1ST THRU 4TH FLOOR | 2x6's @ 16" O.C (BALLOON FRAME 1ST. FL.) (8'-1 1/8" WALL W/ 2'-0" LADDER TRUSS 2ND-4TH) |

**3 / F1-5** — INTERIOR CORRIDOR & BEARING WALL - SEE DETAIL C/F3-2

| | |
|---|---|
| 1ST FLOOR | 2x6's @ 12" O.C. (BALLOON FRAME 1ST. FL.) DOUBLE STUD UNDER FLOOR TRUSSES |
| 2ND FLOOR | 2x6's @ 12" O.C. DOUBLE STUD UNDER FLOOR TRUSSES |
| 3RD FLOOR | 2x6's @ 12" O.C. - ALIGN UNDER FLOOR TRUSSES |
| 4TH FLOOR | 2x6's @ 16" O.C |

**4 / F1-5** — INTERIOR TENANT SEPARATION WALL

| | |
|---|---|
| 1ST THRU 4TH FLOOR | DOUBLE 2x4 STUD WALL WITH 1" AIR SPACE SPACE @ 16" O.C. BALLOON FRAME 1ST, 2ND & 3RD FL. 10'-1 1/8". 4TH FLOOR 8'-1 1/8" |

**5 / F1-5** — INTERIOR TENANT SEPARATION SHEAR WALL

| | |
|---|---|
| 1ST THRU 4TH FLOOR | DOUBLE 2x4 STUD WALL WITH 1" AIR SPACE SPACE @ 16" O.C. WITH 5/8" PLYWOOD INSTALLED IN AIR SPACE. BALLOON FRAME 1ST, 2ND & 3RD FL. 10'-1 1/8". 4TH FLOOR 8'-1 1/8" |

**6 / F1-5** — INTERIOR TENANT SEPARATION SHEARWALL WALL BEARING ON ONE SIDE

| | |
|---|---|
| 1ST FLOOR | 2x6's @ 12" O.C. DOUBLE STUD UNDER FLOOR TRUSSES. BALLOON FRAME 10'-1 1/8" W/ 7/16" OSB |
| 2ND & 3RD FLOOR | 2x6's @ 12" O.C STUDS TO FALL UNDER FLOOR TRUSSES. BALLOON FRAME 10'-1 1/8" W/ 7/16" OSB |
| 4TH FLOOR | 2x6's @ 16" O.C W/ 5/8" PLYWOOD IN AIR SPACE |

**7 / F1-5** — STAIR SHEARWALLS SEE DETAIL 1/F3-2

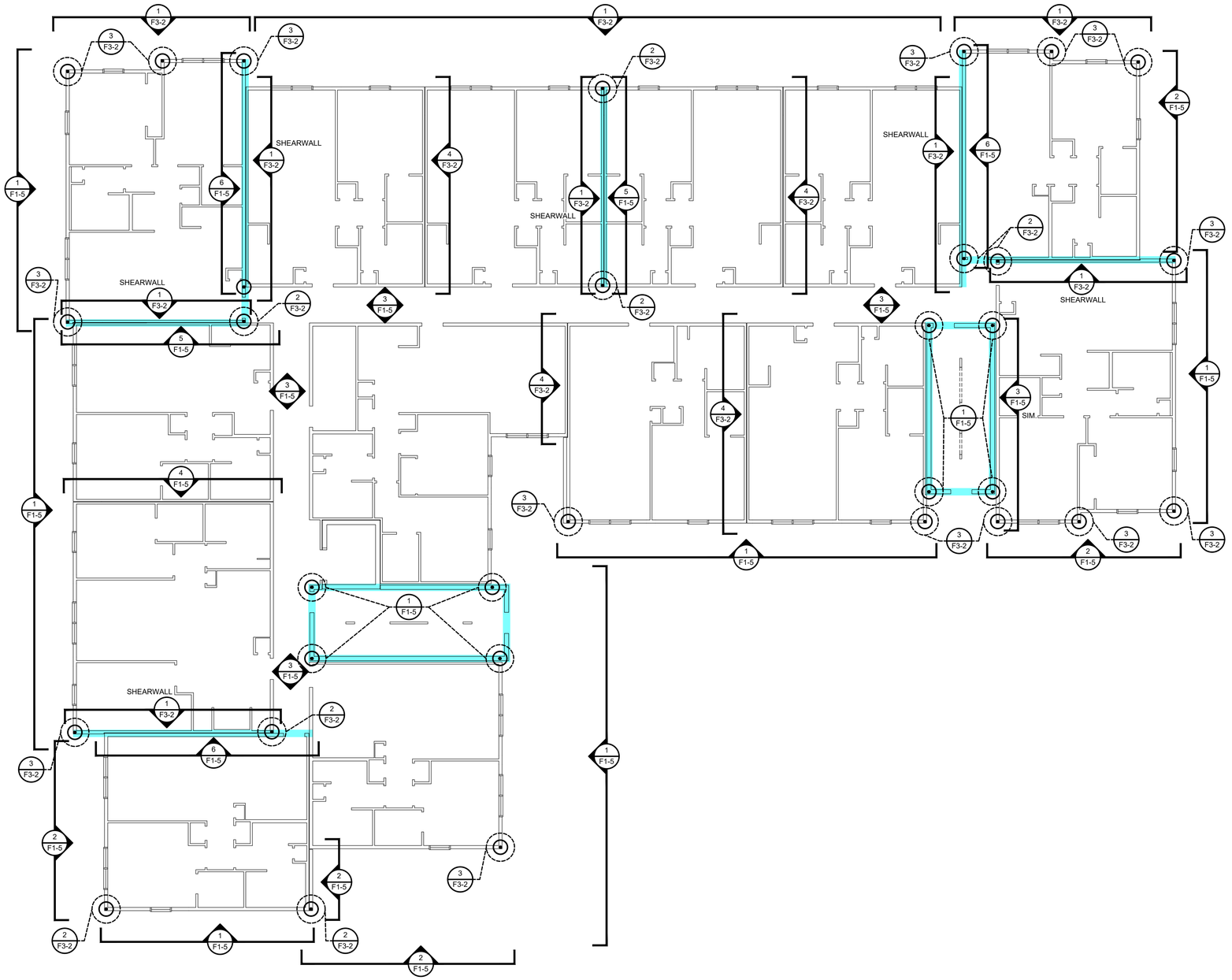
| | |
|---|---|
| 1ST-4TH FLOOR | 2x8's @ 16" O.C. W/ 2 LAYERS 5/8" FIRECODE DRYWALL OVER 5/8" T&G PLYWOOD EACH SIDE. NAIL PLYWOOD @ 6" O.C. IN FIELD & 4" O.C. ON EDGES W/ 10D NAILS (TWO (2) HOUR RATING PER UL U301) |

**8 / F1-5** — STAIR EXTERIOR SHEARWALLS

| | |
|---|---|
| 1ST-4TH FLOOR | 2x8's @ 16" O.C. W/ 2 LAYERS 5/8" FIRECODE DRYWALL ON INTERIOR FACE (FIRE SIDE) PER UL U349 W/ 7/16" OSB EXTERIOR SHEATHING. |

## FRAMING LEGEND

- POINT LOAD CONT. TO FOOTING
- FLOOR TRUSS
- ROOF TRUSS
- ROOF LINE
- CONVENTIONAL FRAMING OR VALLEY SET TRUSSES
- HEADER
- SHEAR WALL
- DRAFTSTOPPING
- INTERIOR BEARING WALL
- METAL JOIST OR TRUSS HANGERS
- SEE WALL SCHEDULE
- SIMPSON HOLD DOWNS
- (1) HEATING PLENUM, (2) DRYER DUCT, (3) PLUMBING DROPS & (4) WASHER BOX (1, 2, 3 & 4)




THIRD FLOOR PLAN

SCALE: 1/8" = 1'-0"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PROJECT:

TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

HOLD-DOWN, SHEARWALL & STUD SCHEDULE PLAN

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## WALL FRAMING SCHEDULE

**1 / F1-5** — EXTERIOR LOAD BEARING WALL - SEE DETAIL A & B/F3-2

| | |
|---|---|
| 1ST FLOOR | 2x6's @ 12" O.C. (BALLOON FRAME - 10'-1 1/8") DOUBLE STUD UNDER FLOOR TRUSSES |
| 2ND FLOOR | 2x6's @ 12" O.C. DOUBLE STUD UNDER FLOOR TRUSSES |
| 3RD FLOOR | 2x6's @ 12" O.C. - ALIGN UNDER FLOOR TRUSSES |
| 4TH FLOOR | 2x6's @ 16" O.C. |

**2 / F1-5** — EXTERIOR WALLS NOT SUPPORTING FLOOR TRUSSES

| | |
|---|---|
| 1ST THRU 4TH FLOOR | 2x6's @ 16" O.C (BALLOON FRAME 1ST. FL.) (8'-1 1/8" WALL W/ 2'-0" LADDER TRUSS 2ND-4TH) |

**3 / F1-5** — INTERIOR CORRIDOR & BEARING WALL - SEE DETAIL C/F3-2

| | |
|---|---|
| 1ST FLOOR | 2x6's @ 12" O.C. (BALLOON FRAME 1ST. FL.) DOUBLE STUD UNDER FLOOR TRUSSES |
| 2ND FLOOR | 2x6's @ 12" O.C. DOUBLE STUD UNDER FLOOR TRUSSES |
| 3RD FLOOR | 2x6's @ 12" O.C. - ALIGN UNDER FLOOR TRUSSES |
| 4TH FLOOR | 2x6's @ 16" O.C |

**4 / F1-5** — INTERIOR TENANT SEPARATION WALL

| | |
|---|---|
| 1ST THRU 4TH FLOOR | DOUBLE 2x4 STUD WALL WITH 1" AIR SPACE SPACE @ 16" O.C. BALLOON FRAME 1ST, 2ND & 3RD FL. 10'-1 1/8". 4TH FLOOR 8'-1 1/8" |

**5 / F1-5** — INTERIOR TENANT SEPARATION SHEAR WALL

| | |
|---|---|
| 1ST THRU 4TH FLOOR | DOUBLE 2x4 STUD WALL WITH 1" AIR SPACE SPACE @ 16" O.C. WITH 5/8" PLYWOOD INSTALLED IN AIR SPACE. BALLOON FRAME 1ST, 2ND & 3RD FL. 10'-1 1/8". 4TH FLOOR 8'-1 1/8" |

**6 / F1-5** — INTERIOR TENANT SEPARATION SHEARWALL WALL BEARING ON ONE SIDE

| | |
|---|---|
| 1ST FLOOR | 2x6's @ 12" O.C. DOUBLE STUD UNDER FLOOR TRUSSES. BALLOON FRAME 10'-1 1/8" W/ 7/16" OSB |
| 2ND & 3RD FLOOR | 2x6's @ 12" O.C STUDS TO FALL UNDER FLOOR TRUSSES. BALLOON FRAME 10'-1 1/8" W/ 7/16" OSB |
| 4TH FLOOR | 2x6's @ 16" O.C W/ 5/8" PLYWOOD IN AIR SPACE |

**7 / F1-5** — STAIR SHEARWALLS SEE DETAIL 1/F3-2

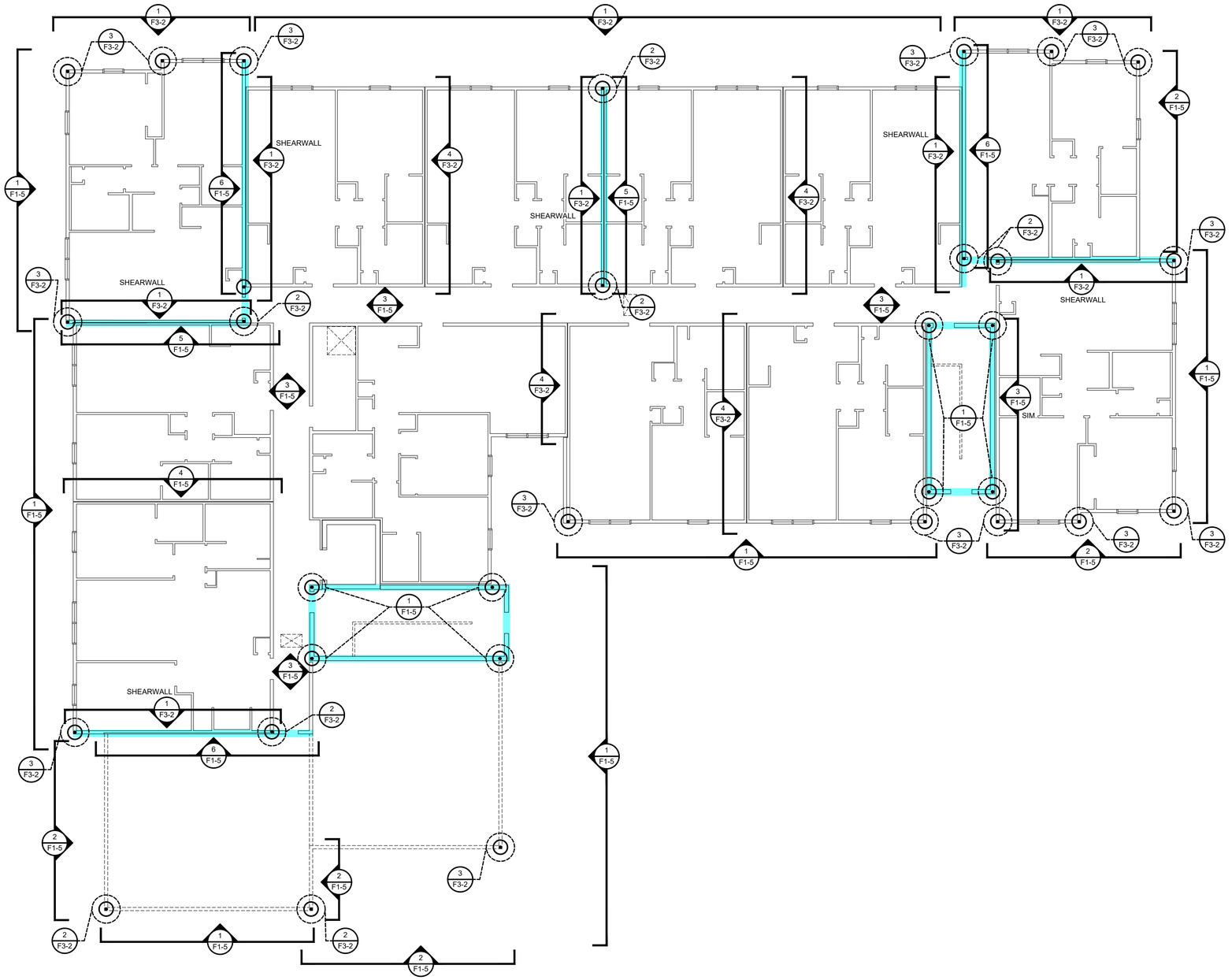
| | |
|---|---|
| 1ST-4TH FLOOR | 2x8's @ 16" O.C. W/ 2 LAYERS 5/8" FIRECODE DRYWALL OVER 5/8" T&G PLYWOOD EACH SIDE. NAIL PLYWOOD @ 6" O.C. IN FIELD & 4" O.C. ON EDGES W/ 10D NAILS (TWO (2) HOUR RATING PER UL U301) |

**8 / F1-5** — STAIR EXTERIOR SHEARWALLS

| | |
|---|---|
| 1ST-4TH FLOOR | 2x8's @ 16" O.C. W/ 2 LAYERS 5/8" FIRECODE DRYWALL ON INTERIOR FACE (FIRE SIDE) PER UL U349 W/ 7/16" OSB EXTERIOR SHEATHING. |

## FRAMING LEGEND

- POINT LOAD CONT. TO FOOTING
- FLOOR TRUSS
- ROOF TRUSS
- ROOF LINE
- CONVENTIONAL FRAMING OR VALLEY SET TRUSSES
- HEADER
- SHEAR WALL
- DRAFTSTOPPING
- INTERIOR BEARING WALL
- METAL JOIST OR TRUSS HANGERS
- SEE WALL SCHEDULE
- SIMPSON HOLD DOWNS
- (1) HEATING PLENUM, (2) DRYER DUCT, (3) PLUMBING DROPS & (4) WASHER BOX — 1, 2, 3 & 4




FOURTH FLOOR PLAN

SCALE: 1/8" = 1'-0"


KONTOGIANNIS & ASSOCIATES

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PROJECT:

# TANNER'S CREEK MANOR

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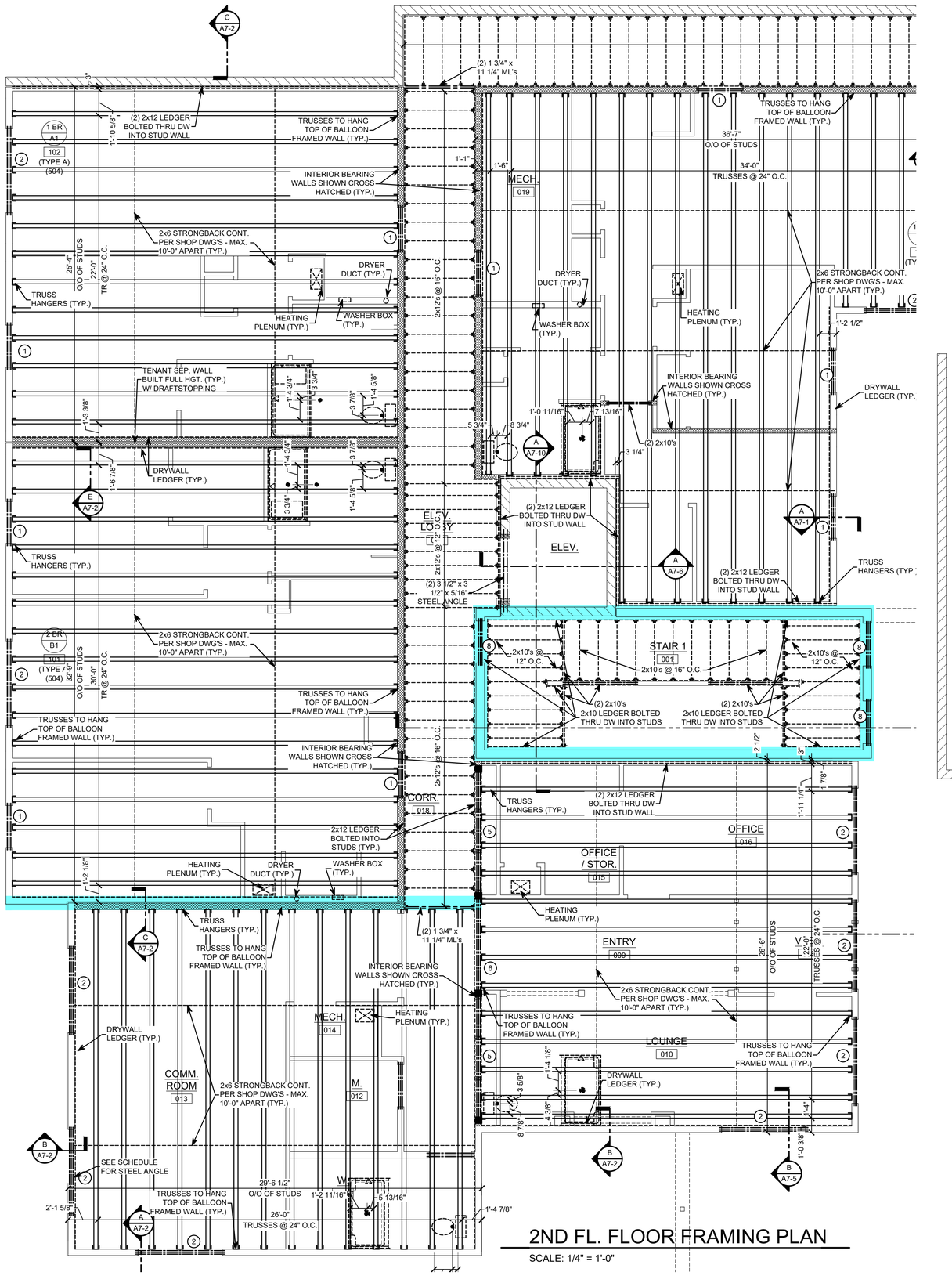



## 2ND FL. FLOOR FRAMING PLAN

SCALE: 1/4" = 1'-0"

## FLOOR FRAMING GENERAL NOTES:

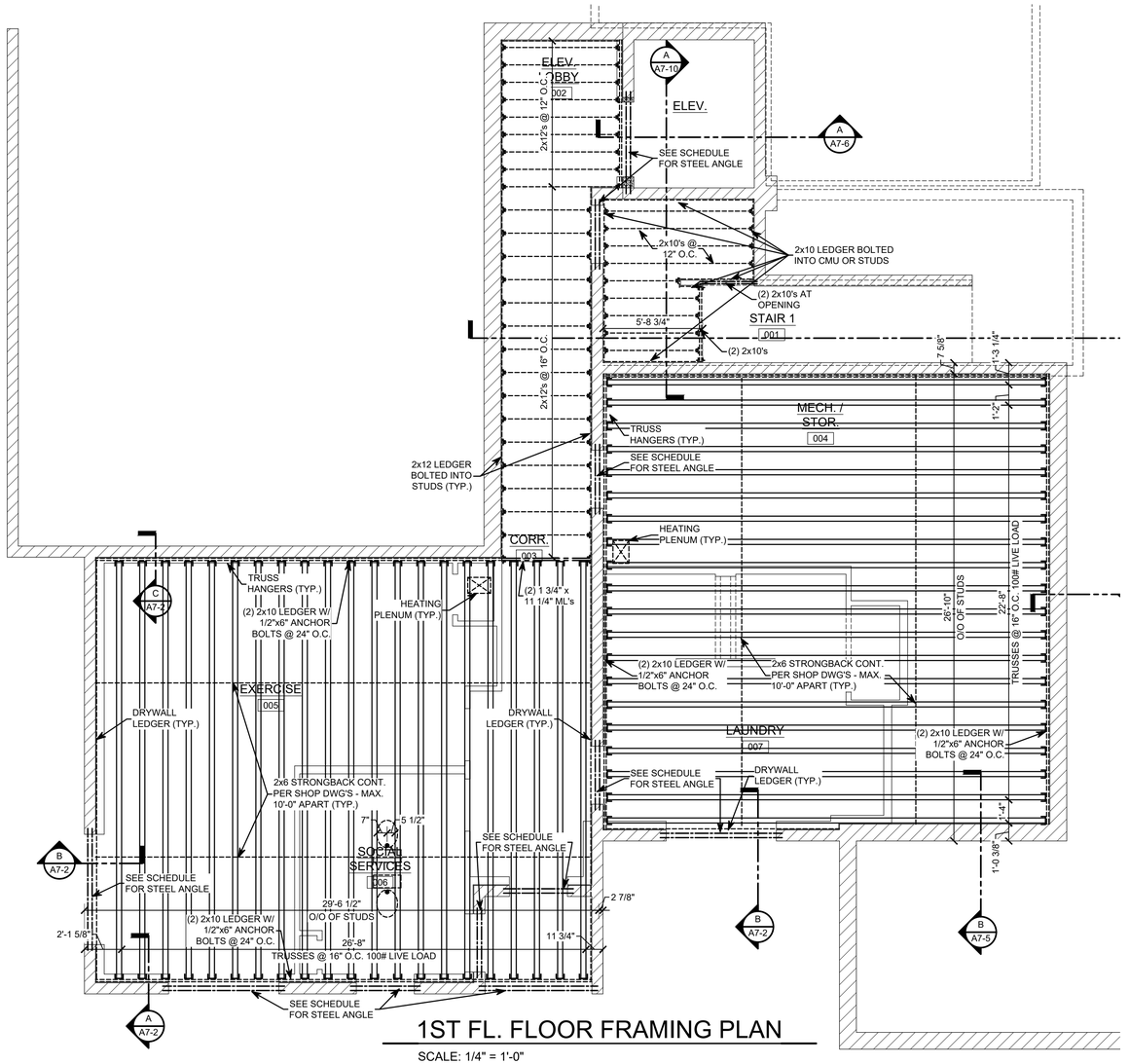
1. ALL FLOOR TRUSSES ARE TO BE 24" O.C. UNLESS NOTED OTHERWISE.
2. PROVIDE METAL FLOOR TRUSS HANGERS FOR ALL HANGING FLOOR TRUSSES.
3. WHERE FLOOR TRUSSES ARE REQUIRED TO FRAME INTO OTHER FLOOR TRUSSES OR LEDGERS, DESIGN OF THE CONNECTIONS ARE TO BE THE RESPONSIBILITY OF THE TRUSS SUPPLIER. THE TRUSS SUPPLIER IS TO MAKE NECESSARY PROVISIONS IN THE SUPPORTING TRUSS TO ACCEPT THE TYPE OF HANGER REQUIRED. THE DESIGN OF ALL WEB MEMBER PERMANENT BRACING REQUIRED FOR THE STRUCTURAL ADEQUACY OF THE TRUSSES, IS TO BE THE SOLE RESPONSIBILITY OF THE TRUSS SUPPLIER. ADDITIONAL PERMANENT BRACE SIZES AND CONNECTIONS, NOT PROVIDED BY THE SHEATHING SHOWN ON THE CONSTRUCTION DRAWINGS, ARE TO BE THE SOLE RESPONSIBILITY OF THE TRUSS SUPPLIER. THIS BRACING CAN INCLUDE, BUT IS NOT LIMITED TO, STRONG BACK BRACING. PROVIDE ANY AND ALL DETAILS WITH FLOOR TRUSS SUBMITTALS.
4. PLUMBING DROPS AND MECHANICAL PLENUMS SHOWN DOTTED. PROVIDE DROPS ON SHOP DRAWING LAYOUTS.
5. 2x6 STRONGBACKS TO BE INSTALLED VERTICALLY PER THE SHOP DRAWING DETAILS AT THE TOP OR BOTTOM OF TRUSSES SPACED AT MAX. 10'-0" APART.

## FRAMING LEGEND

- POINT LOAD CONT. TO FOOTING
- FLOOR TRUSS
- ROOF TRUSS
- ROOF LINE
- CONVENTIONAL FRAMING OR VALLEY SET TRUSSES
- HEADER
- SHEAR WALL
- DRAFTSTOPPING
- INTERIOR BEARING WALL
- METAL JOIST OR TRUSS HANGERS
- SEE WALL SCHEDULE
- SIMPSON HOLD DOWNS
- (1) HEATING PLENUM, (2) DRYER DUCT, (3) PLUMBING DROPS & (4) WASHER BOX

## HEADER & BEAM SCHEDULE

1. EXTERIOR WALL - 3'-0" & 3'-4" OPENINGS - (3) 2x8's W/ (2) 1/2" PLYWOOD CONT. FLITCH PLATES (SOLID HEADER)
2. EXTERIOR WALL - 6'-0" & 8'-0" OPENINGS - (3) 1 3/4" x 7 1/4" ML's W/ (1) 1/4" PLYWOOD CONT. FLITCH PLATE (SOLID HEADER)
3. PORCH BEAMS - (2) 1 3/4" x 5 1/2" ML's
4. (3) 1 3/4" x 7 1/4" ML's W/ (1) 1/4" PLYWOOD CONT. FLITCH PLATE (SOLID HEADER)
5. (3) 1 3/4" x 9 1/4" 2.0E ML's W/ (1) 1/4" PLYWOOD CONT. FLITCH PLATE (SOLID HEADER) COLUMN TO HAVE (2) KING 2x6 STUDS & (1) 2x6 JACK EACH SIDE. INSTALL HEADER TIGHT TO DOUBLE TOP PLATE. INSTALL BLOCKING AT CEILING LINE. (10'-1 1/8" FULL HGT. WALL)
6. (3) 1 3/4" x 11 1/4" 2.0E ML's W/ (1) 1/4" PLYWOOD CONT. FLITCH PLATE (SOLID HEADER) SET 2x6 JACK STUD AT EACH END WITH INTERMEDIATE POSTS. INSTALL HEADER TIGHT TO DOUBLE TOP PLATE. INSTALL BLOCKING AT CEILING LINE. (10'-1 1/8" FULL HGT. WALL)
7. (3) 1 3/4" x 14" 2.0E ML's W/ (1) 1/4" PLYWOOD CONT. FLITCH PLATE (SOLID HEADER) INSTALL (2) 2x6 JACK STUDS AT EACH END. INSTALL HEADER TIGHT TO DOUBLE TOP PLATE. INSTALL BLOCKING AT CEILING LINE. (10'-1 1/8" FULL HGT. WALL)
8. STAIR WALLS - (3) 2x8's W/ (2) 5/8" PLYWOOD CONT. FLITCH PLATES (SOLID HEADER)




## 1ST FL. FLOOR FRAMING PLAN

SCALE: 1/4" = 1'-0"

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PROJECT: TANNER'S CREEK MANOR
58 DOUGHTY ROAD, LAWRENCEBURG, IN 47025

DRAWING TITLE: ENLARGED FLOOR FRAMING PLANS
DATE: 06/26/2026
REVISED:

SUBMISSION SET 06/27/2025
BID SET 08/27/2025
PERMIT SET
CONSTRUCTION SET

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EXPIRATION DATE 12/31/2027
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## FLOOR FRAMING GENERAL NOTES:

1. ALL FLOOR TRUSSES ARE TO BE 24" O.C. UNLESS NOTED OTHERWISE.
2. PROVIDE METAL FLOOR TRUSS HANGERS FOR ALL HANGING FLOOR TRUSSES.
3. WHERE FLOOR TRUSSES ARE REQUIRED TO FRAME INTO OTHER FLOOR TRUSSES OR LEDGERS, DESIGN OF THE CONNECTIONS ARE TO BE THE RESPONSIBILITY OF THE TRUSS SUPPLIER. THE TRUSS SUPPLIER IS TO MAKE NECESSARY PROVISIONS IN THE SUPPORTING TRUSS TO ACCEPT THE TYPE OF HANGER REQUIRED. THE DESIGN OF ALL WEB MEMBER PERMANENT BRACING REQUIRED FOR THE STRUCTURAL ADEQUACY OF THE TRUSSES, IS TO BE THE SOLE RESPONSIBILITY OF THE TRUSS SUPPLIER. ADDITIONAL PERMANENT BRACE SIZES AND CONNECTIONS, NOT PROVIDED BY THE SHEATHING SHOWN ON THE CONSTRUCTION DRAWINGS, ARE TO BE THE SOLE RESPONSIBILITY OF THE TRUSS SUPPLIER. THIS BRACING CAN INCLUDE, BUT IS NOT LIMITED TO, STRONG BACK BRACING. PROVIDE ANY AND ALL DETAILS WITH FLOOR TRUSS SUBMITTALS.
4. PLUMBING DROPS AND MECHANICAL PLENUMS SHOWN DOTTED. PROVIDE DROPS ON SHOP DRAWING LAYOUTS.
5. 2x6 STRONGBACKS TO BE INSTALLED VERTICALLY PER THE SHOP DRAWING DETAILS AT THE TOP OR BOTTOM OF TRUSSES SPACED AT MAX. 10'-0" APART.

## FRAMING LEGEND

- POINT LOAD CONT. TO FOOTING
- FLOOR TRUSS
- ROOF TRUSS
- ROOF LINE
- CONVENTIONAL FRAMING OR VALLEY SET TRUSSES
- HEADER
- SHEAR WALL
- DRAFTSTOPPING
- INTERIOR BEARING WALL
- METAL JOIST OR TRUSS HANGERS
- SEE WALL SCHEDULE
- SIMPSON HOLD DOWNS
- (1) HEATING PLENUM, (2) DRYER DUCT, (3) PLUMBING DROPS & (4) WASHER BOX (1, 2, 3 & 4)

## HEADER & BEAM SCHEDULE

1. EXTERIOR WALL - 3'-0" & 3'-4" OPENINGS - (3) 2x8's W/ (2) 1/2" PLYWOOD CONT. FLITCH PLATES (SOLID HEADER)
2. EXTERIOR WALL - 6'-0" & 8'-0" OPENINGS - (3) 1 3/4" x 7 1/4" ML's W/ (1) 1/4" PLYWOOD CONT. FLITCH PLATE (SOLID HEADER)
3. PORCH BEAMS - (2) 1 3/4" x 5 1/2" ML's
4. (3) 1 3/4" x 7 1/4" ML's W/ (1) 1/4" PLYWOOD CONT. FLITCH PLATE (SOLID HEADER)
5. (3) 1 3/4" x 9 1/4" 2.0E ML's W/ (1) 1/4" PLYWOOD CONT. FLITCH PLATE (SOLID HEADER) COLUMN TO HAVE (2) KING 2x6 STUDS & (1) 2x6 JACK EACH SIDE. INSTALL HEADER TIGHT TO DOUBLE TOP PLATE. INSTALL BLOCKING AT CEILING LINE. (10'-1 1/8" FULL HGT. WALL)
6. (3) 1 3/4" x 11 1/4" 2.0E ML's W/ (1) 1/4" PLYWOOD CONT. FLITCH PLATE (SOLID HEADER) SET 2x6 JACK STUD AT EACH END WITH INTERMEDIATE POSTS. INSTALL HEADER TIGHT TO DOUBLE TOP PLATE. INSTALL BLOCKING AT CEILING LINE. (10'-1 1/8" FULL HGT. WALL)
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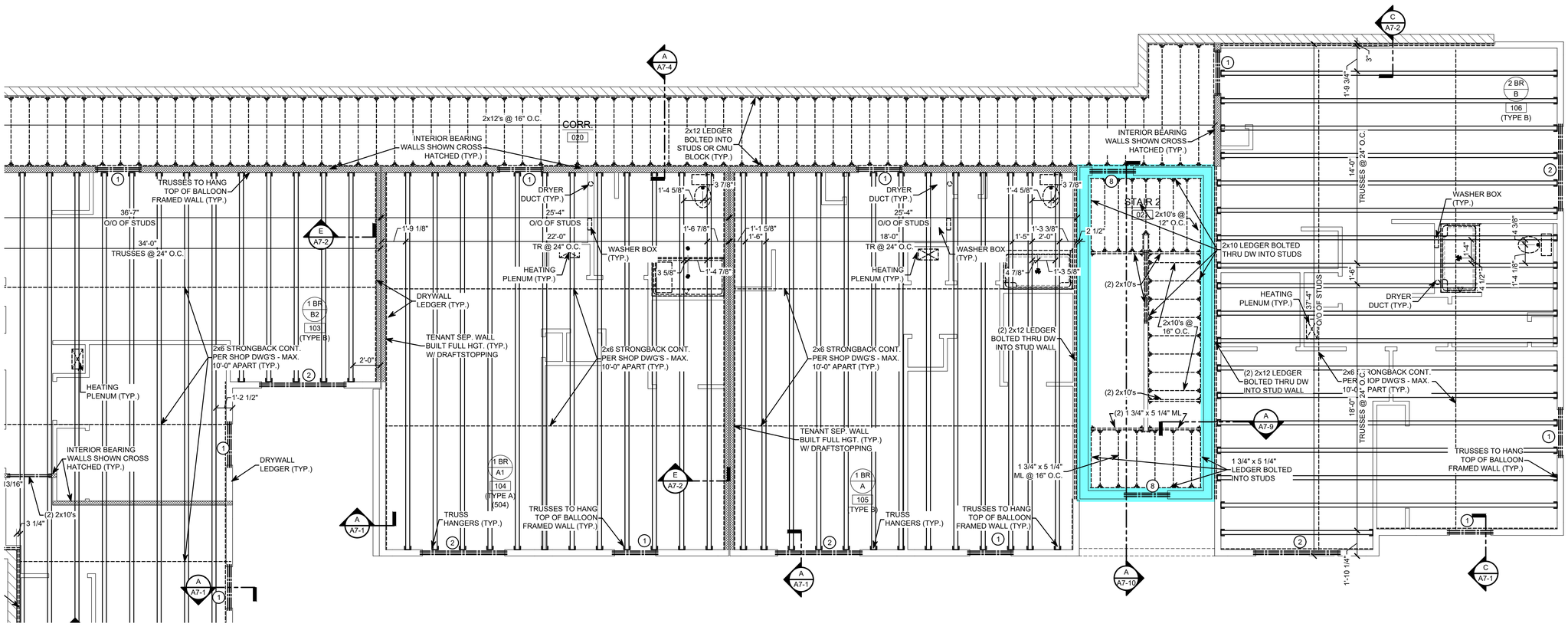
8. STAIR WALLS - (3) 2x8's W/ (2) 5/8" PLYWOOD CONT. FLITCH PLATES (SOLID HEADER)




## 2ND FL. FLOOR FRAMING PLAN

SCALE: 1/4" = 1'-0"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PROJECT:

TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

ENLARGED FLOOR FRAMING PLAN

DATE: 06/26/2026
REVISED:

GEORGE J. KONTOGIANNIS REGISTERED No. AR00034309 STATE OF INDIANA ARCHITECT

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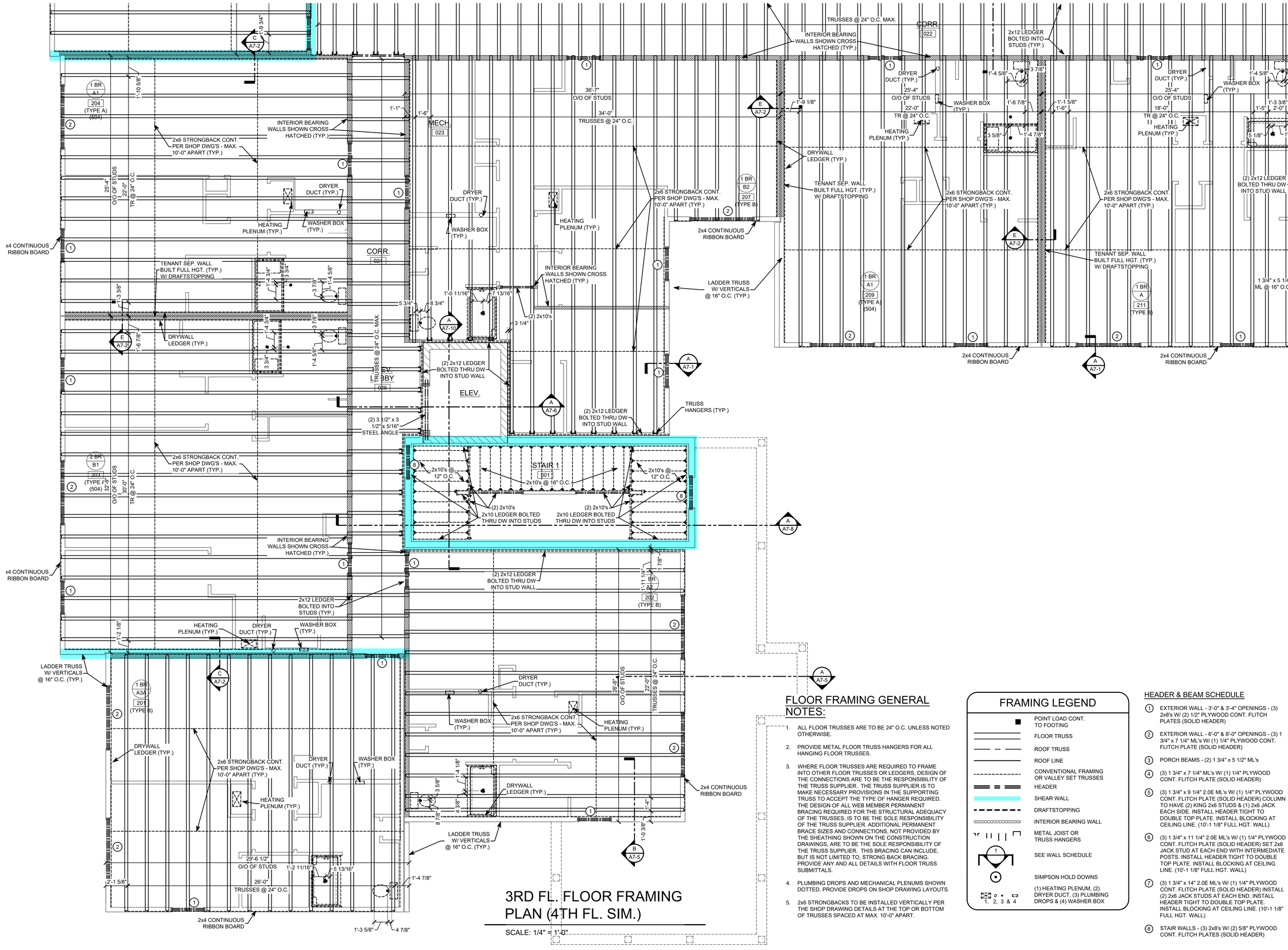


# 3RD FL. FLOOR FRAMING PLAN (4TH FL. SIM.)

SCALE: 1/4" = 1'-0"

## FLOOR FRAMING GENERAL NOTES:

1. ALL FLOOR TRUSSES ARE TO BE 24" O.C. UNLESS NOTED OTHERWISE.
2. PROVIDE METAL FLOOR TRUSS HANGERS FOR ALL HANGING FLOOR TRUSSES.
3. WHERE FLOOR TRUSSES ARE REQUIRED TO FRAME INTO OTHER FLOOR TRUSSES OR LEDGERS, DESIGN OF THE CONNECTIONS ARE TO BE THE RESPONSIBILITY OF THE TRUSS SUPPLIER. THE TRUSS SUPPLIER IS TO MAKE NECESSARY PROVISIONS IN THE SUPPORTING TRUSS TO ACCEPT THE TYPE OF HANGER REQUIRED. THE DESIGN OF ALL WEB MEMBER PERMANENT BRACING REQUIRED FOR THE STRUCTURAL ADEQUACY OF THE TRUSSES, IS TO BE THE SOLE RESPONSIBILITY OF THE TRUSS SUPPLIER. ADDITIONAL PERMANENT BRACE SIZES AND CONNECTIONS, NOT PROVIDED BY THE SHEATHING SHOWN ON THE CONSTRUCTION DRAWINGS, ARE TO BE THE SOLE RESPONSIBILITY OF THE TRUSS SUPPLIER. THIS BRACING CAN INCLUDE, BUT IS NOT LIMITED TO, STRONG BACK BRACING. PROVIDE ANY AND ALL DETAILS WITH FLOOR TRUSS SUBMITTALS.
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5. 2x6 STRONGBACKS TO BE INSTALLED VERTICALLY PER THE SHOP DRAWING DETAILS AT THE TOP OR BOTTOM OF TRUSSES SPACED AT MAX. 10'-0" APART.

## FRAMING LEGEND

- POINT LOAD CONT. TO FOOTING
- FLOOR TRUSS
- ROOF TRUSS
- ROOF LINE
- CONVENTIONAL FRAMING OR VALLEY SET TRUSSES
- HEADER
- SHEAR WALL
- DRAFTSTOPPING
- INTERIOR BEARING WALL
- METAL JOIST OR TRUSS HANGERS
- SEE WALL SCHEDULE
- SIMPSON HOLD DOWNS
- (1) HEATING PLENUM, (2) DRYER DUCT, (3) PLUMBING DROPS & (4) WASHER BOX

## HEADER & BEAM SCHEDULE

1. EXTERIOR WALL - 3'-0" & 3'-4" OPENINGS - (3) 2x8's W/ (2) 1/2" PLYWOOD CONT. FLITCH PLATES (SOLID HEADER)
2. EXTERIOR WALL - 6'-0" & 8'-0" OPENINGS - (3) 1 3/4" x 7 1/4" ML's W/ (1) 1/4" PLYWOOD CONT. FLITCH PLATE (SOLID HEADER)
3. PORCH BEAMS - (2) 1 3/4" x 5 1/2" ML's
4. (3) 1 3/4" x 7 1/4" ML's W/ (1) 1/4" PLYWOOD CONT. FLITCH PLATE (SOLID HEADER)
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E-MAIL: architects@kontogiannis.com


PROJECT:

# TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

## ENLARGED FLOOR FRAMING PLAN

DATE: 06/26/2026
REVISED:

GEORGE J. KONTOGIANNIS REGISTERED No. AR00034309 STATE OF INDIANA ARCHITECT

GEORGE J. KONTOGIANNIS, LICENSE #AR00034309
EXPIRATION DATE 12/31/2027


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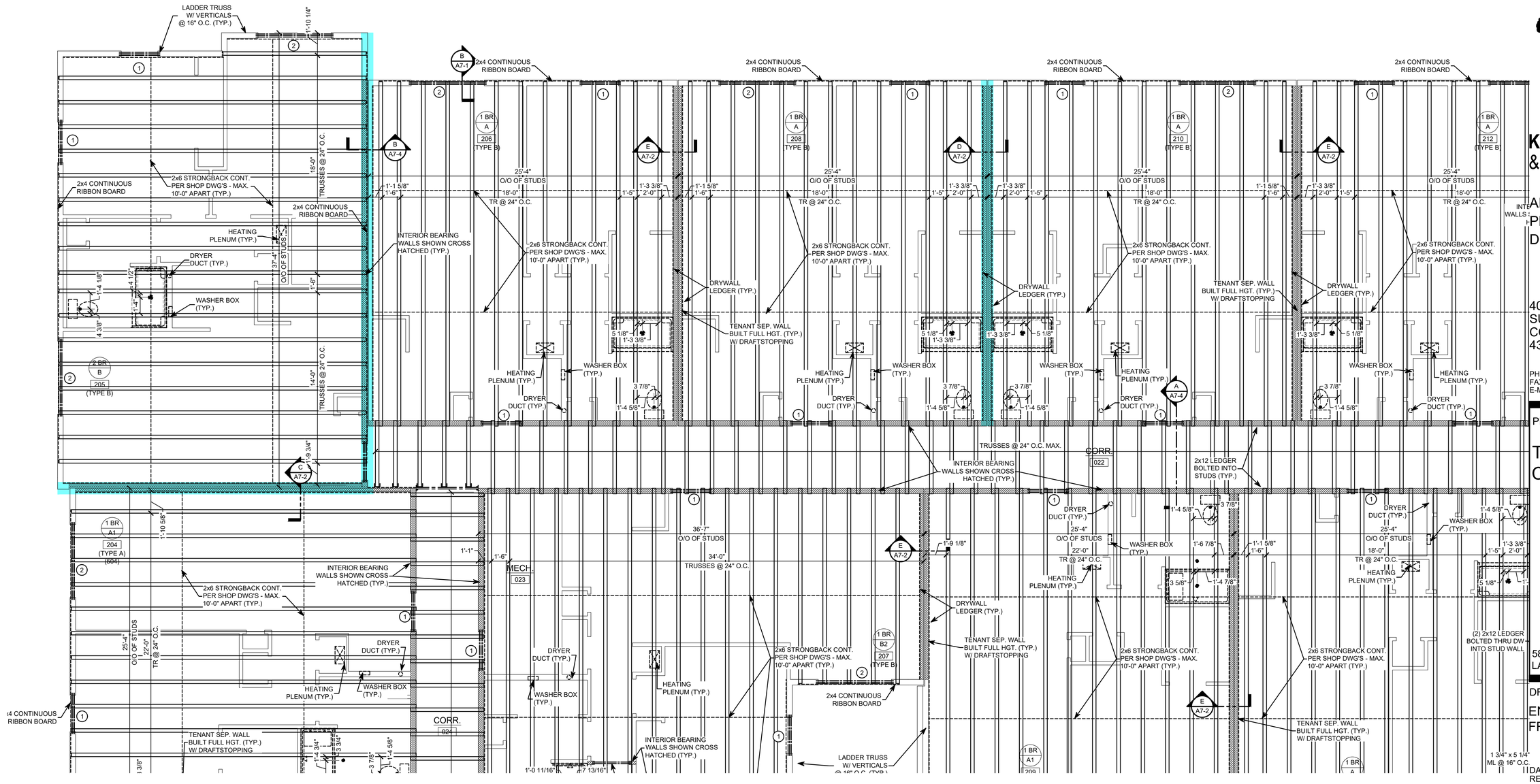


# 3RD FL. FLOOR FRAMING PLAN (4TH FL. SIM.)

SCALE: 1/4" = 1'-0"

## FLOOR FRAMING GENERAL NOTES:

1. ALL FLOOR TRUSSES ARE TO BE 24" O.C. UNLESS NOTED OTHERWISE.
2. PROVIDE METAL FLOOR TRUSS HANGERS FOR ALL HANGING FLOOR TRUSSES.
3. WHERE FLOOR TRUSSES ARE REQUIRED TO FRAME INTO OTHER FLOOR TRUSSES OR LEDGERS, DESIGN OF THE CONNECTIONS ARE TO BE THE RESPONSIBILITY OF THE TRUSS SUPPLIER. THE TRUSS SUPPLIER IS TO MAKE NECESSARY PROVISIONS IN THE SUPPORTING TRUSS TO ACCEPT THE TYPE OF HANGER REQUIRED. THE DESIGN OF ALL WEB MEMBER PERMANENT BRACING REQUIRED FOR THE STRUCTURAL ADEQUACY OF THE TRUSSES, IS TO BE THE SOLE RESPONSIBILITY OF THE TRUSS SUPPLIER. ADDITIONAL PERMANENT BRACE SIZES AND CONNECTIONS, NOT PROVIDED BY THE SHEATHING SHOWN ON THE CONSTRUCTION DRAWINGS, ARE TO BE THE SOLE RESPONSIBILITY OF THE TRUSS SUPPLIER. THIS BRACING CAN INCLUDE, BUT IS NOT LIMITED TO, STRONG BACK BRACING. PROVIDE ANY AND ALL DETAILS WITH FLOOR TRUSS SUBMITTALS.
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## FRAMING LEGEND

- POINT LOAD CONT. TO FOOTING
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- ROOF TRUSS
- ROOF LINE
- CONVENTIONAL FRAMING OR VALLEY SET TRUSSES
- HEADER
- SHEAR WALL
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2. EXTERIOR WALL - 6'-0" & 8'-0" OPENINGS - (3) 1 3/4" x 7 1/4" ML's W/ (1) 1/4" PLYWOOD CONT. FLITCH PLATE (SOLID HEADER)
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PROJECT:

TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
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DRAWING TITLE:

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DATE: 06/26/2026
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## FRAMING LEGEND

- POINT LOAD CONT. TO FOOTING
- FLOOR TRUSS
- ROOF TRUSS
- ROOF LINE
- CONVENTIONAL FRAMING OR VALLEY SET TRUSSES
- HEADER
- SHEAR WALL
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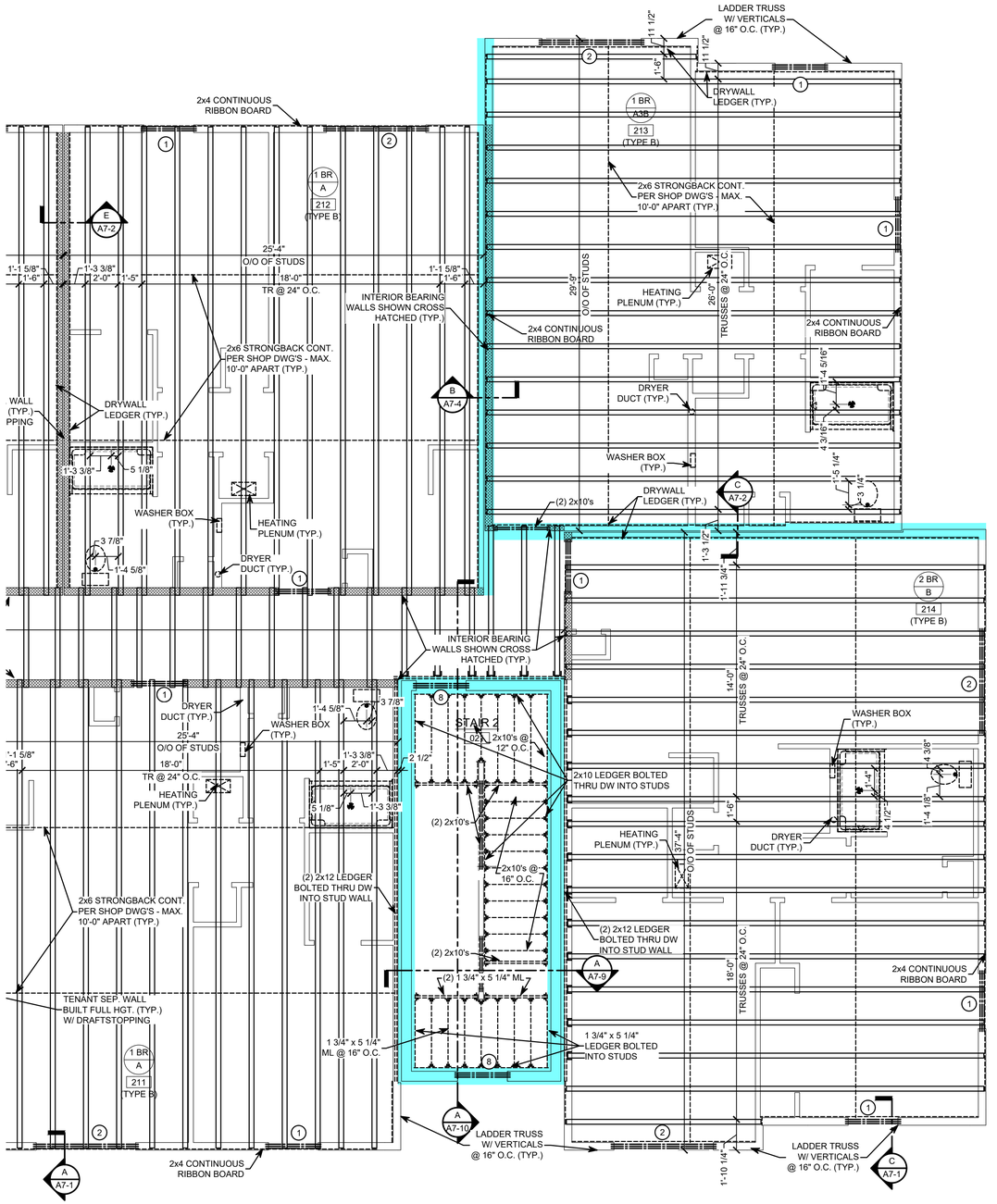


# 3RD FL. FLOOR FRAMING PLAN (4TH FL. SIM.)

SCALE: 1/4" = 1'-0"


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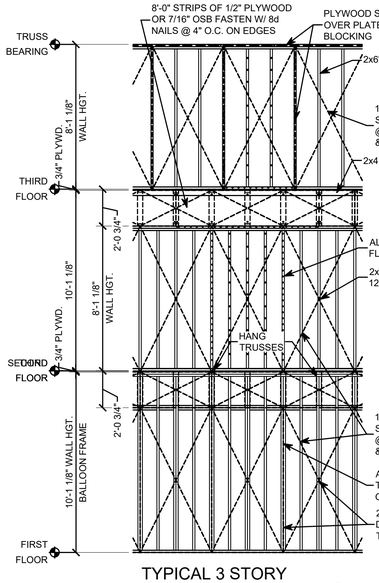
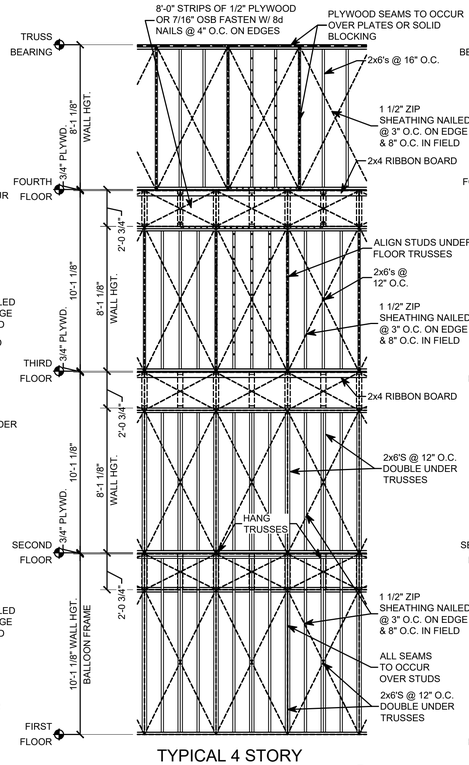


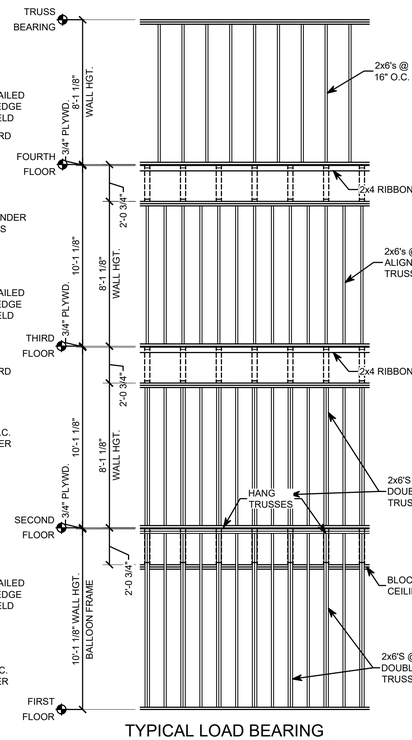

TYPICAL 3 STORY
EXTERIOR BRG. WALL (A)

SCALE: 1/4" = 1'-0"



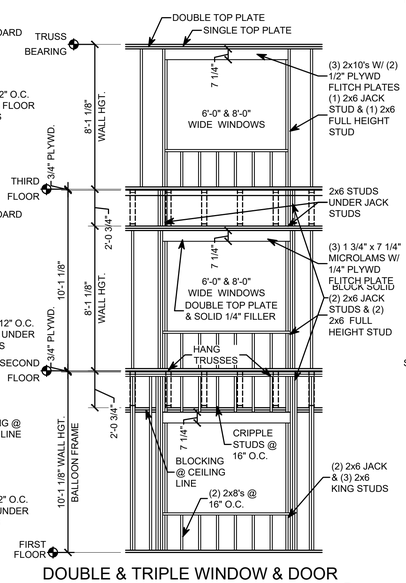

TYPICAL 4 STORY
EXTERIOR BRG. WALL (B)

SCALE: 1/4" = 1'-0"




TYPICAL LOAD BEARING
CORRIDOR WALL (C)

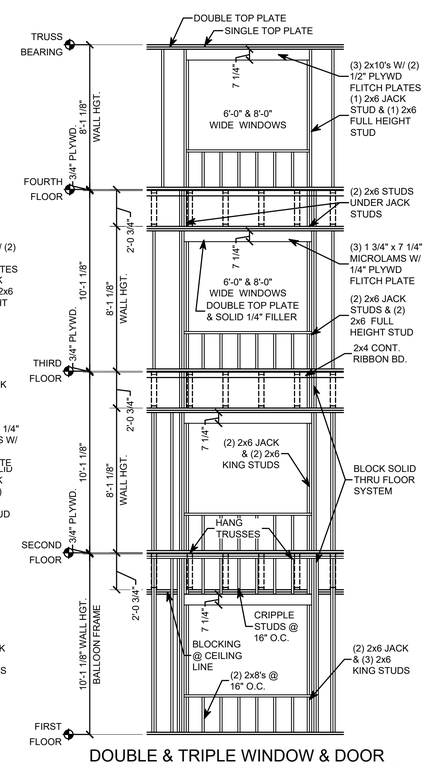
SCALE: 1/4" = 1'-0"




DOUBLE & TRIPLE WINDOW & DOOR
FRAMING IN LOAD BEARING WALL (D)

SCALE: 1/4" = 1'-0"

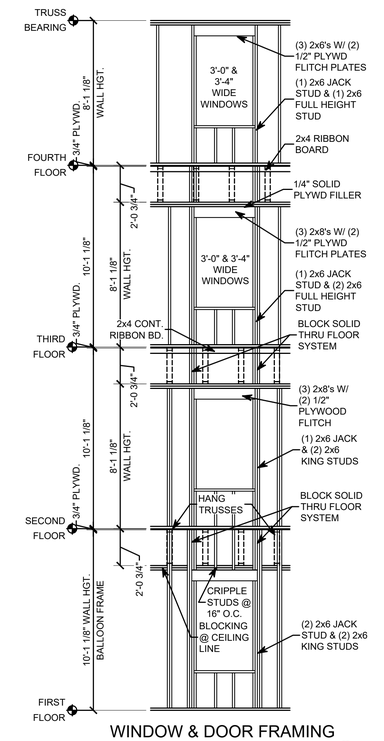
3 STORY




DOUBLE & TRIPLE WINDOW & DOOR
FRAMING IN LOAD BEARING WALL (E)

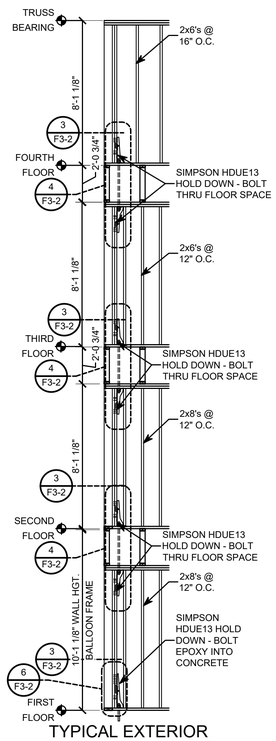
SCALE: 1/4" = 1'-0"

4 STORY




WINDOW & DOOR FRAMING
IN LOAD BRG. WALL (F)

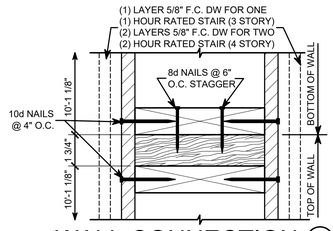
SCALE: 1/4" = 1'-0"




TYPICAL EXTERIOR
CORNER (G)

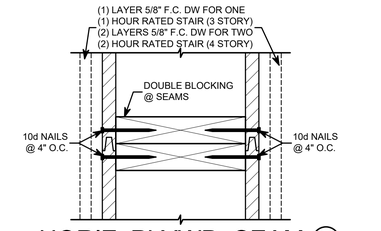
SCALE: 1/4" = 1'-0"

(SEE PLAN)



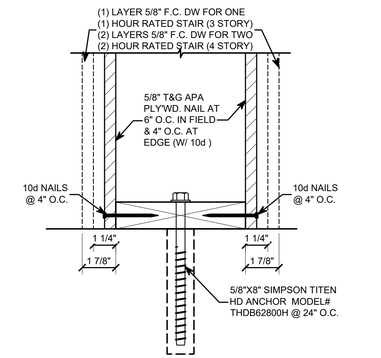

WALL CONNECTION (4)

SCALE: 3" = 1'-0"



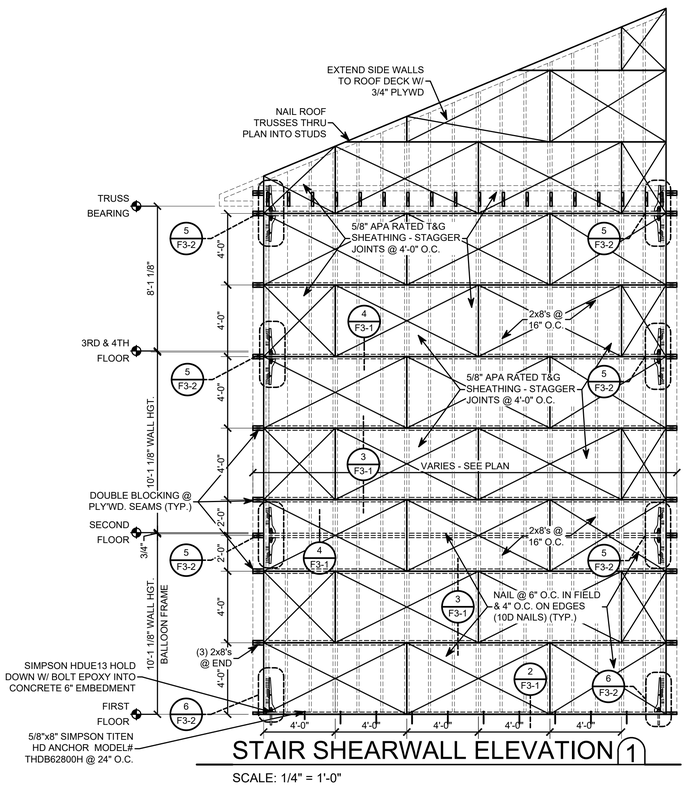

HORIZ. PLYWD. SEAM (3)

SCALE: 3" = 1'-0"




BASE OF WALL (2)

SCALE: 3" = 1'-0"




STAIR SHEARWALL ELEVATION (1)

SCALE: 1/4" = 1'-0"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PROJECT:

# TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

FRAMING NOTES & DETAILS

DATE: 06/26/2026
REVISED:

GEORGE J. KONTOGIANNIS REGISTERED No. AR00034309 STATE OF INDIANA ARCHITECT

GEORGE J. KONTOGIANNIS, LICENSE #AR00034309
EXPIRATION DATE 12/31/2027


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# GENERAL FRAMING NOTES

## WOOD

1. SEE ALL FRAMING DETAILS, TRUSS DIAGRAMS AND WALL SECTIONS.
2. CONCENTRATED BEAM AND LINTEL LOADS SHALL HAVE SOLID 2x STUDS UNDER COMPLETE BEARING SURFACE AND SHALL CONTINUE DOWN THRU WALL TO FOUNDATION.
3. HEADERS SHALL BE CONSTRUCTED OF DOUBLE 2x MEMBERS OR MICROLAMS SIZES AS NOTED. ALL GLUED AND NAILED TOGETHER.
4. WINDBRACING SHALL OCCUR AT SEPARATION WALLS SHOWN ON PLANS.
5. EXTERIOR WALL SHEATHING SHALL BE APA RATED 32/16, 7/16" OSB, WITH EXTERIOR GLUE. SHEATHING TO PROVIDE WIND AND SEISMIC BRACING. FASTEN WITH MIN 8d COMMON NAILS @ 4" O.C. ALONG EDGES AND ENDS AND 8" O.C. AT INTERMEDIATE MEMBERS. ALL PANEL SEAMS SHALL OCCUR OVER STUDS OR PLATES OR PROVIDE SOLID BLOCKING.
6. ALL FRAMING FASTENING SHALL BE PER IBC TABLE 2304.9.1 AS A MINIMUM UNLESS MORE STRINGENT REQUIREMENTS ARE LISTED ON THE DRAWINGS.
7. ALL DOOR AND WINDOW OPENINGS UP TO 6'-0" SHALL HAVE ONE JACK AND ONE STUD. OPENINGS 6'-0" & OVER SHALL HAVE TWO (2) JACKS AND ONE STUD.
8. EXTERIOR & INTERIOR BEARING WALL STUD SPACING SHALL BE AS SHOWN IN DETAIL.
   EXTERIOR BEARING WALLS:
   SEE WALL FRAMING SCHEDULE & HOLD DOWN PLANS
   INTERIOR BEARING WALLS:
   SEE WALL FRAMING SCHEDULE & HOLD DOWN PLANS
9. EXTERIOR WALL WALL WINDOW & DOOR HEADERS ARE TO BE AS NOTED ON PLANS.

## STEEL

1. STEEL ANGLE LINTELS LISTED SHALL BE PROVIDED FOR EACH 4" OF MASONRY WALL THICKNESS AND SHALL HAVE A MINIMUM OF 6" OF BEARING AT EACH END. STEEL LINTELS SHALL BE SHOPPED PRIMED AND PAINTED TWO (2) COATS.

## STEEL LINTEL SCHEDULE

| OPENING | STEEL SIZE @ BRICK | STEEL SIZE @ BLOCK |
|---|---|---|
| 1'-6" OR LESS | 3/8" x 2" FLAT BAR | 3/8" x 2" FLAT BAR |
| 1'-7" - 3'-6" | 3 1/2" x 3 1/2" x 1/4" ANGLE | 3 1/2" x 3 1/2" x 5/16" ANGLE |
| 3'-7" - 5'-0" | 4" x 3 1/2" x 1/4" ANGLE LLV | 4" x 3 1/2" x 5/16" ANGLE LLV |
| 5'-1" - 6'-0" | 5" x 3 1/2" x 1/4" ANGLE LLV | 5" x 3 1/2" x 5/16" ANGLE LLV |
| 6'-1" - 7'-0" | 5" x 3 1/2" x 1/4" ANGLE LLV | 5" x 3 1/2" x 5/16" ANGLE LLV |

## ROOF TRUSSES

1. LATERAL BRACING: TRUSS FABRICATOR SHALL DESIGN FOR AND PROVIDE CONTINUOUS LATERAL BRACING FASTENED TO EACH TRUSS AS REQUIRED. LATERAL BRACING SIZE, LOCATIONS AND FASTENING REQUIREMENTS TO BE SHOWN ON TRUSS SHOP DRAWINGS

## DRAFTSTOPPING

1. PROVIDE SELF CLOSING (20"x48") 1/2" OSB OR 7/16" OSB DOORS IN OSB DRAFTSTOPPING AT LOCATIONS SHOWN ON FRAMING PLAN. PROVIDE SPRING HINGES. ACCESS DOORS THRU FIRE RATED WALLS SHALL BE ONE (1) HOUR RATED. SEE FRAMING PLAN(S) FOR TYPE OF DOOR AND ANY/ALL RESPECTIVE LOCATIONS.
2. DRAFTSTOPPING SHALL EXTEND THROUGH ALL EAVES AND OTHER HIDDEN SPACES.
3. DRAFTSTOPPING MAY BE 1/2" DRYWALL, 7/16" OR 1/2" OSB.

## WINDBRACING

1. IN LOCATIONS WHERE THE SEPARATION WALL IS USED FOR BRACING, THE INSTALLATION SHALL BE IN ACCORDANCE WITH THE DETAILS SHOWN. THE WALLS, FLOOR LADDER PANELS ETC. SHALL BE NAILED AS SHOWN SO THAT FORCES ARE TRANSFERRED TO THE SLAB. THE FIRST FLOOR PLATE SHALL BE ATTACHED WITH SIMPSON TITEN HD SCREW ANCHORS, SEE BASE DETAIL.

GENERAL NOTE

01. GOVERNING CODE: LOCAL BUILDING CODE

02. DESIGN LOADS:

LOAD TABLE

| FLOOR | LIVE | DEAD | TOTAL |
|---|---|---|---|
| RESIDENTIAL (APARTMENTS) | 40 lbs./SQ.FT. | 20 lbs./SQ.FT. | 60 lbs./SQ.FT. |
| PUBLIC AREAS (COMMON AREA, BUSINESS) | 100 lbs./SQ.FT. | 20 lbs./SQ.FT. | 120 lbs./SQ.FT. |
| STAIRS | 100 lbs./SQ.FT. | 20 lbs./SQ.FT. | 120 lbs./SQ.FT. |
| | 300 lbs./SQ.FT. (CONCENTRATED) | | |
| ROOFS | | | |
| RESIDENTIAL | 25 lbs./SQ.FT. | 20 lbs./SQ.FT. | 45 lbs./SQ.FT. |
| UNINHABITED ATTIC WITHOUT STORAGE | 10 lbs./SQ.FT. | | 10 lbs./SQ.FT. |

ROOF SNOW LOADS:

| | |
|---|---|
| GROUND SNOW LOAD (Pg) | 25 PSF |
| EXPOSURE FACTOR (Ce) | 1.0 |
| IMPORTANCE FACTOR (I) | 1.0 |
| FLAT ROOF SNOW LOAD (Pf) | 30 PSF |
| THERMAL FACTOR (Ct) | 1.1 |

WIND LOADS:

| | |
|---|---|
| ULTIMATE WIND SPEED | 109 MPH |
| NOMINAL WIND SPEED | 84.4 MPH |
| EXPOSURE CATEGORY | EXP. C |
| INTERNAL PRESSURE COEFFICIENT (GCp1) | ± 0.18 |
| RISK CATEGORY | II |

COMPONENTS & CLADDING DESIGN WIND PRESSURE PER THE COMPONENT AND CLADDING WIND PRESSURE DIAGRAM. REFER TO ASCE 7-16 FOR ZONE DEFINITION.
COMPONENT AND CLADDING WIND PRESSURE DIAGRAM BASE ON ULTIMATE WIND SPEED:

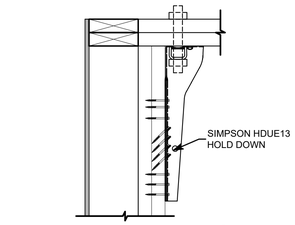
| | TRIB. AREA | TRIB. AREA | TRIB. AREA |
|---|---|---|---|
| ROOF | 10 SQ. FT | 50 SQ. FT | 100 SQ. FT |
| ZONE 1 | -49.2 PSF | -31.8 PSF | -24.3 PSF |
| ZONE 2E | -49.2 PSF | -31.8 PSF | -24.3 PSF |
| ZONE 2R | -49.2 PSF | -31.8 PSF | -24.3 PSF |
| ZONE 2N | -54.1 PSF | -40.8 PSF | -35.1 PSF |
| ZONE 3R | -54.1 PSF | -40.8 PSF | -35.1 PSF |
| ZONE 3E | -66.4 PSF | -48.8 PSF | -41.3 PSF |
| OVERHANGS | | | |
| ZONE 2E | -64.6 PSF | -47.2 PSF | -39.7 PSF |
| ZONE 2R | -64.6 PSF | -47.2 PSF | -39.7 PSF |
| ZONE 2N | -69.5 PSF | -56.2 PSF | -50.5 PSF |
| ZONE 3R | -69.5 PSF | -56.2 PSF | -50.5 PSF |
| ZONE 3E | -81.8 PSF | -64.2 PSF | -56.7 PSF |
| POSITIVE | | | |
| ALL ZONES | 26.8 PSF | 19.9 PSF | 16.9 PSF |
| WALLS | | | |
| ZONE 4 | -31.8 PSF | -28.7 PSF | -27.4 PSF |
| ZONE 5 | -39.2 PSF | -33.1 PSF | -30.5 PSF |
| POSITIVE | | | |
| ALL ZONES | 29.3 PSF | 26.2 PSF | 24.9 PSF |

SEISMIC DESIGN CRITERIA:

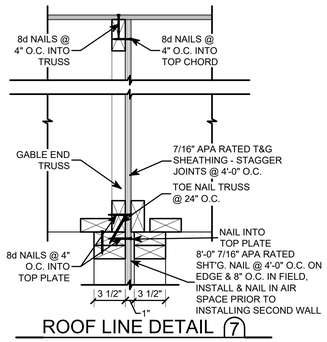
| | |
|---|---|
| SEISMIC USE GROUP | I |
| Sds | 0.18 |
| Sd1 | 0.10 |
| SITE CLASS | C |
| SEISMIC IMPORTANCE FACTOR (Ie) | 1.0 |
| SEISMIC DESIGN CATEGORY | B |
| Cs | 0.04 |
| R | 6.5 |
| BASIC SRUCTURAL SYSTEM: BEARING WALL SYSTEM | |
| SEISMIC FORCE RESISTING SYSTEM: LIGHT FRAME WALLS WITH SHEAR PANELS DESIGN BASE SHEAR | 39 KIPS |
| ANALYSIS PROCEDURE: SIMPLIFIED ANALYSIS PROCEDURE (PER 1616.6.1) | |

ROOF LIVE LOAD DEFLECTION LIMIT: L/360
FLOOR LIVE LOAD DEFLECTION LIMIT: L/480

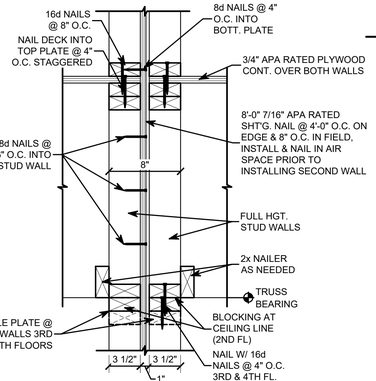
03. SOIL DESIGN LOAD: 2,000 PSF



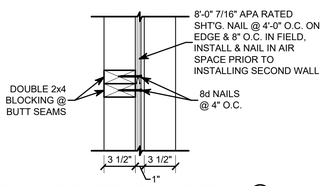

ROOF LINE DETAIL 11
SCALE: 1 1/2" = 1'-0"



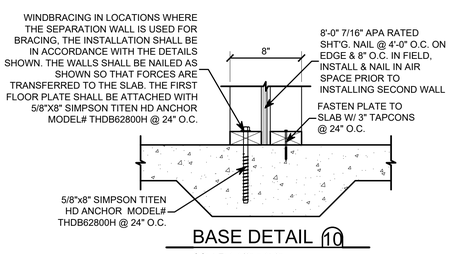

ROOF LINE DETAIL 7
SCALE: 1 1/2" = 1'-0"



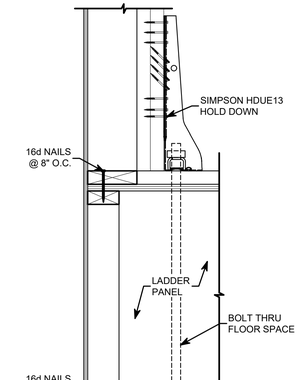

FLOOR LINE DETAIL 8
SCALE: 1 1/2" = 1'-0"



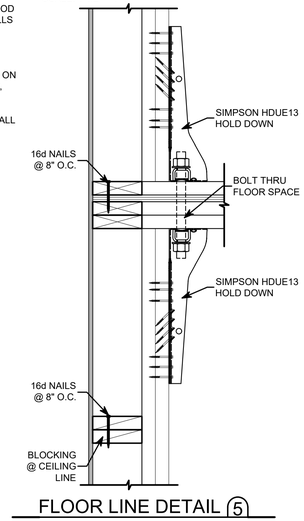

PLYWD BUTT SEAM DETAIL 9
SCALE: 1 1/2" = 1'-0"



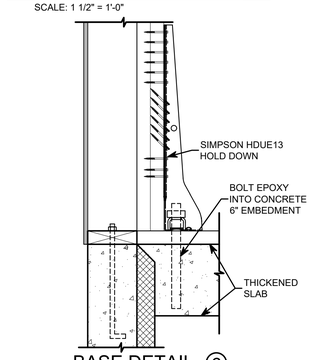

BASE DETAIL 10
SCALE: 1 1/2" = 1'-0"




FLOOR LINE DETAIL 4
SCALE: 1 1/2" = 1'-0"

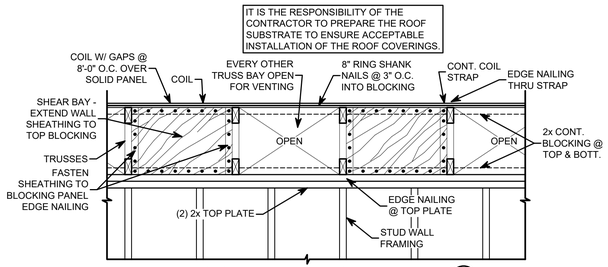



FLOOR LINE DETAIL 5
SCALE: 1 1/2" = 1'-0"

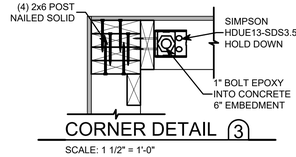



BASE DETAIL 6
SCALE: 1 1/2" = 1'-0"

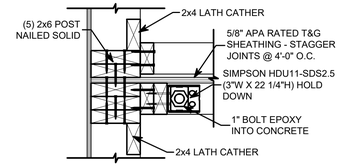
IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PREPARE THE ROOF SUBSTRATE TO ENSURE ACCEPTABLE INSTALLATION OF THE ROOF COVERINGS.



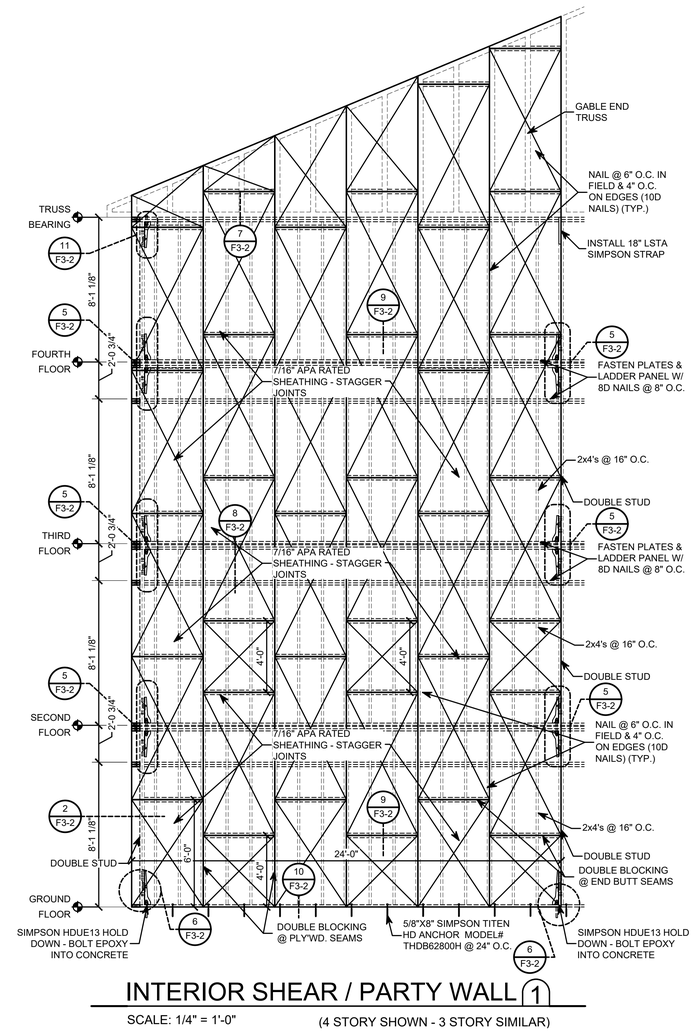

TRUSS BEARING DETAIL A
SCALE: 3/4" = 1'-0"




CORNER DETAIL 3
SCALE: 1 1/2" = 1'-0"




TENANT SEPARATION SHEAR WALL DETAIL 2
SCALE: 1 1/2" = 1'-0"




INTERIOR SHEAR / PARTY WALL 1
SCALE: 1/4" = 1'-0" (4 STORY SHOWN - 3 STORY SIMILAR)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PROJECT:

TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

FRAMING NOTES & DETAILS

DATE: 06/26/2026
REVISED:

GEORGE J. KONTOGIANNIS REGISTERED No. AR00034309 STATE OF INDIANA ARCHITECT

GEORGE J. KONTOGIANNIS, LICENSE #AR00034309
EXPIRATION DATE 12/31/2027


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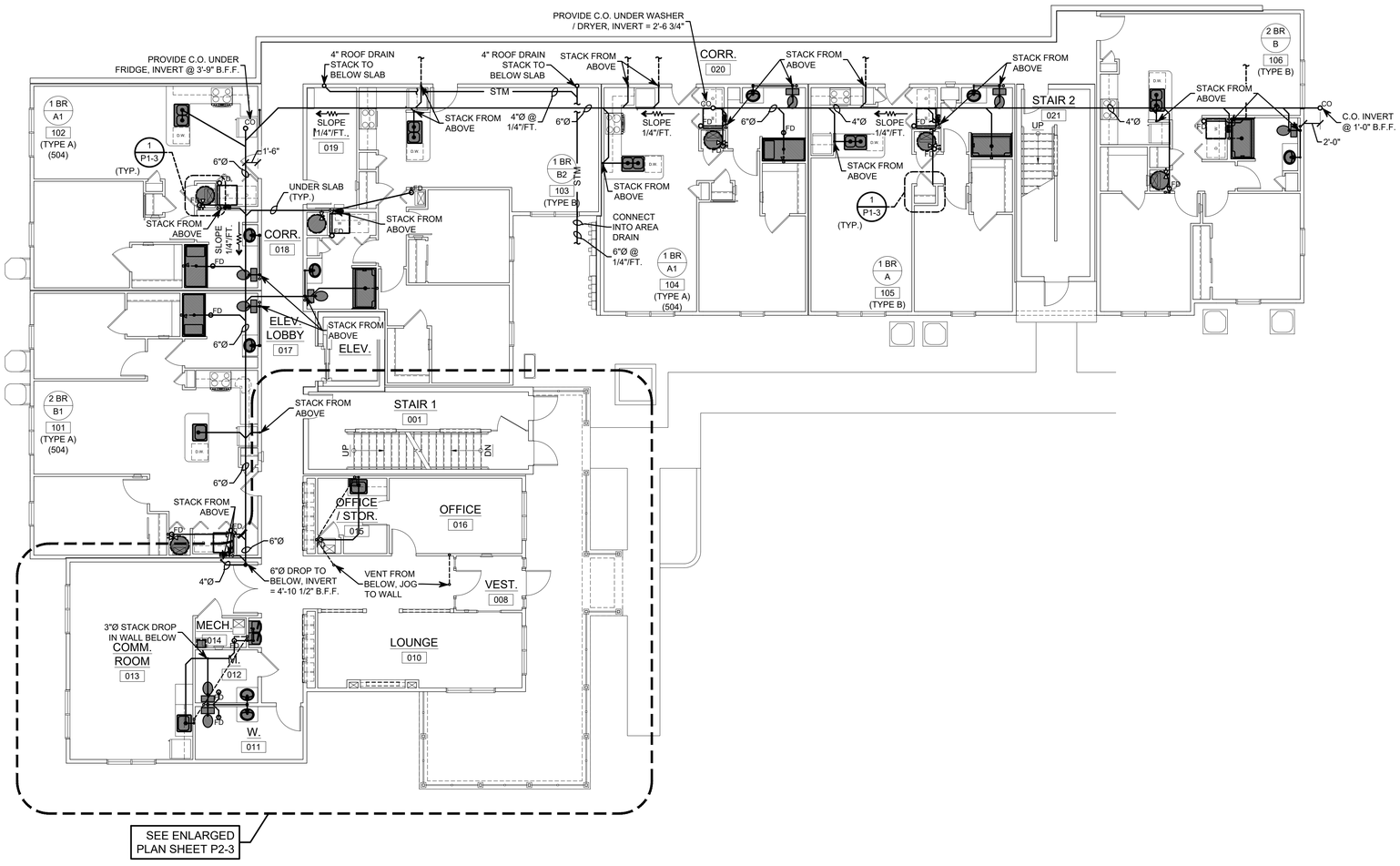
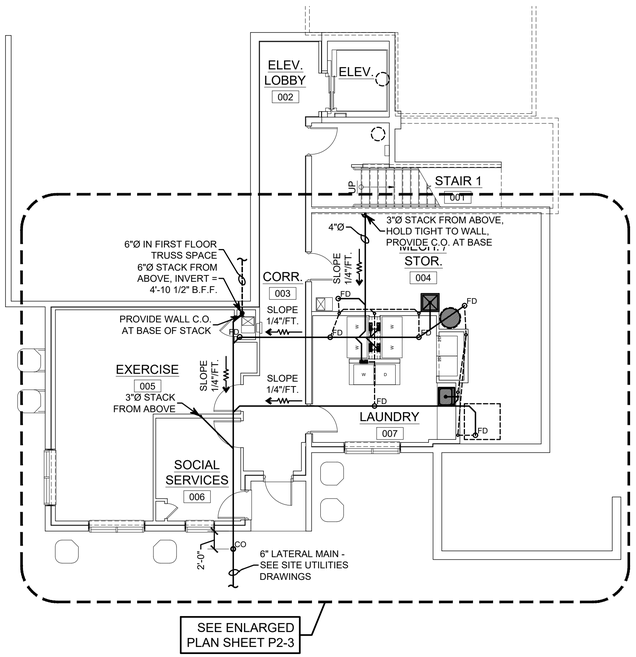



## FIRST FLOOR PLUMBING PLAN

SCALE: 1/8" = 1'-0"




## GROUND FLOOR PLUMBING PLAN

SCALE: 1/8" = 1'-0"

### SANITARY FIXTURE UNITS

| QTY. | FIXTURE TYPE | DFU | TOTAL |
|---|---|---|---|
| 46 | BATHROOM GROUP (1.6 gpf WC) | 5 | 230 |
| 48 | KITCHEN SINK, W/ DISPOSAL, DISHWASHER | 2 | 96 |
| 2 | PUBLIC WATER CLOSET (1.6 gpf) | 4 | 8 |
| 2 | LAVATORY | 1 | 2 |
| 1 | SERVICE SINK | 2 | 2 |
| 46 | PIVATE WASHER | 2 | 92 |
| 5 | PUBLIC WASHER | 3 | 15 |
| 1 | DRINKING FOUNTAIN | .5 | .5 |
| 21 | FLOOR DRAIN | 2 | 40 |
| 92 | EMERGENCY FLOOR DRAINS | 0 | 0 |
| TOTAL BUILDING FIXTURE UNITS | | | 487.5 |
| REQUIRED BUILDING SERVICE SIZE | | | 6" |

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PROJECT:
TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:
GROUND & FIRST FLOOR BUILDING PLUMBING PLANS

GEORGE KONTOGIANNIS REGISTERED No. AR00034309 STATE OF INDIANA ARCHITECT

DATE: 06/26/2026
REVISED:

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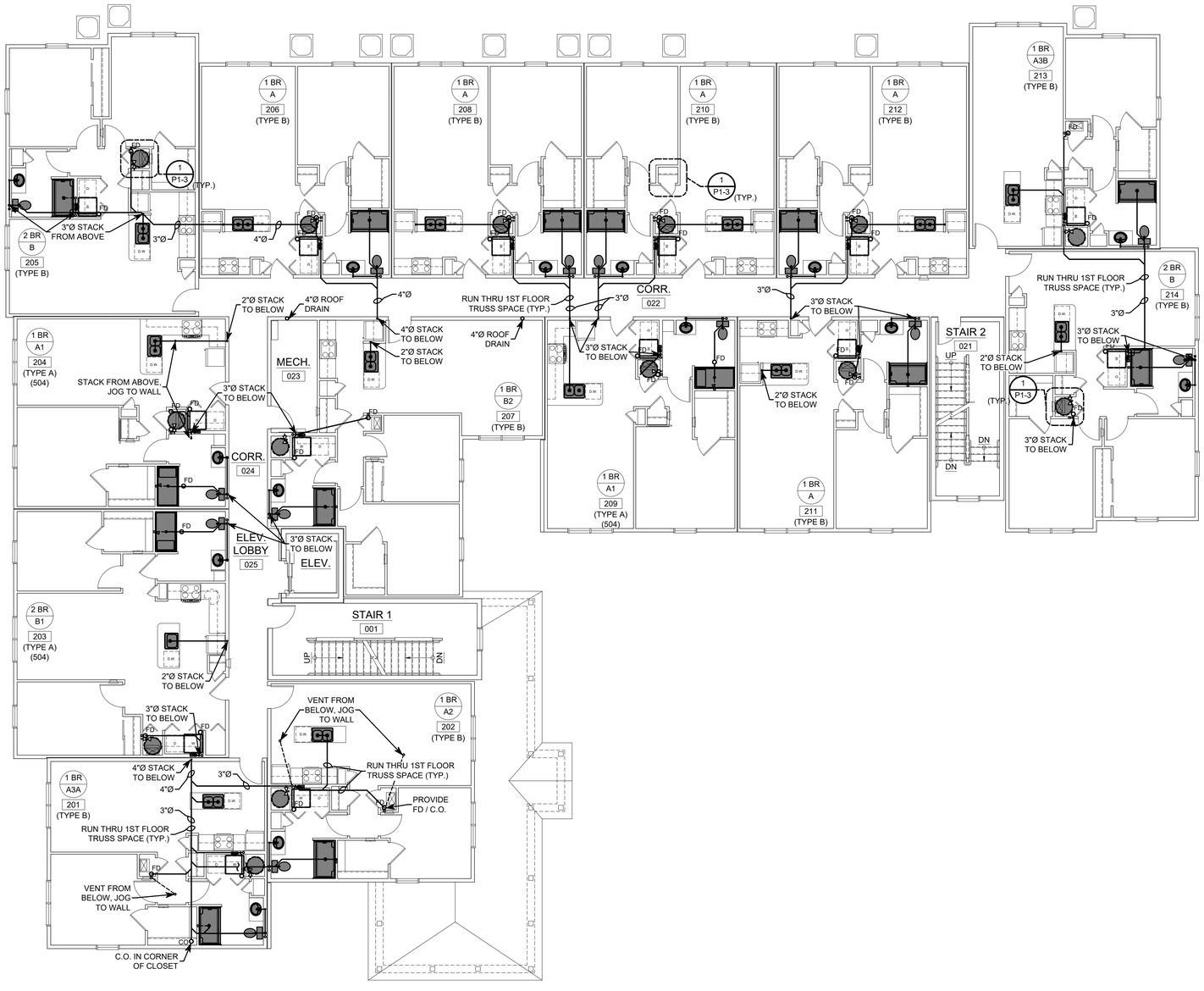


SECOND FLOOR PLUMBING PLAN
(THIRD & FOURTH FLOOR SIM.)

SCALE: 1/8" = 1'-0"


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& ASSOCIATES

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PROJECT:

TANNER'S
CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

SECOND FLOOR
BUILDING
PLUMBING PLAN

DATE: 06/26/2026
REVISED:

GEORGE J. KONTOGIANNIS REGISTERED No. AR00034309 STATE OF INDIANA ARCHITECT

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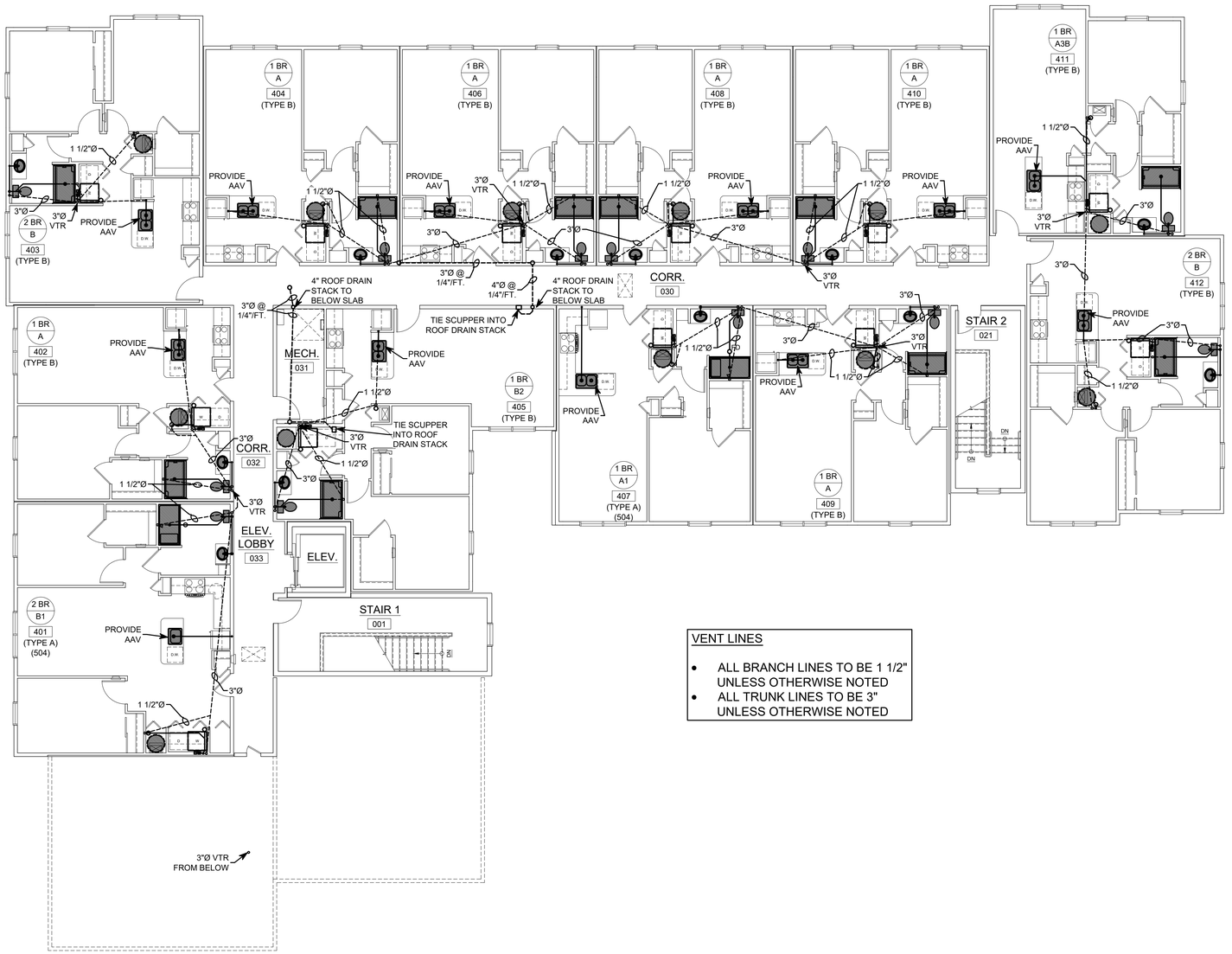


VENT LINES

- ALL BRANCH LINES TO BE 1 1/2" UNLESS OTHERWISE NOTED
- ALL TRUNK LINES TO BE 3" UNLESS OTHERWISE NOTED

## FOURTH FLOOR PLUMBING PLAN

SCALE: 1/8" = 1'-0"


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PROJECT:

# TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

FOURTH FLOOR BUILDING PLUMBING PLAN

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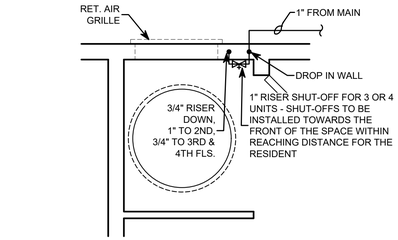
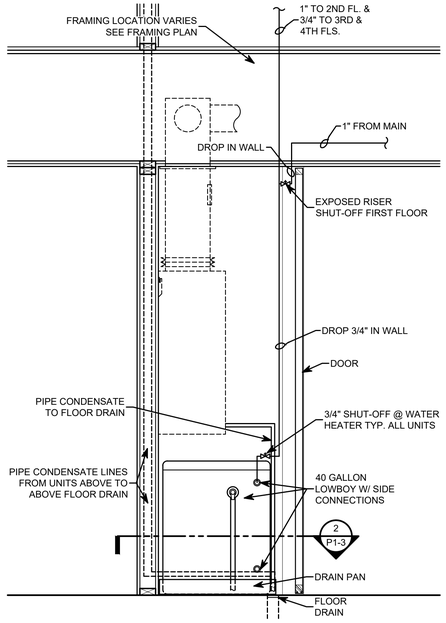


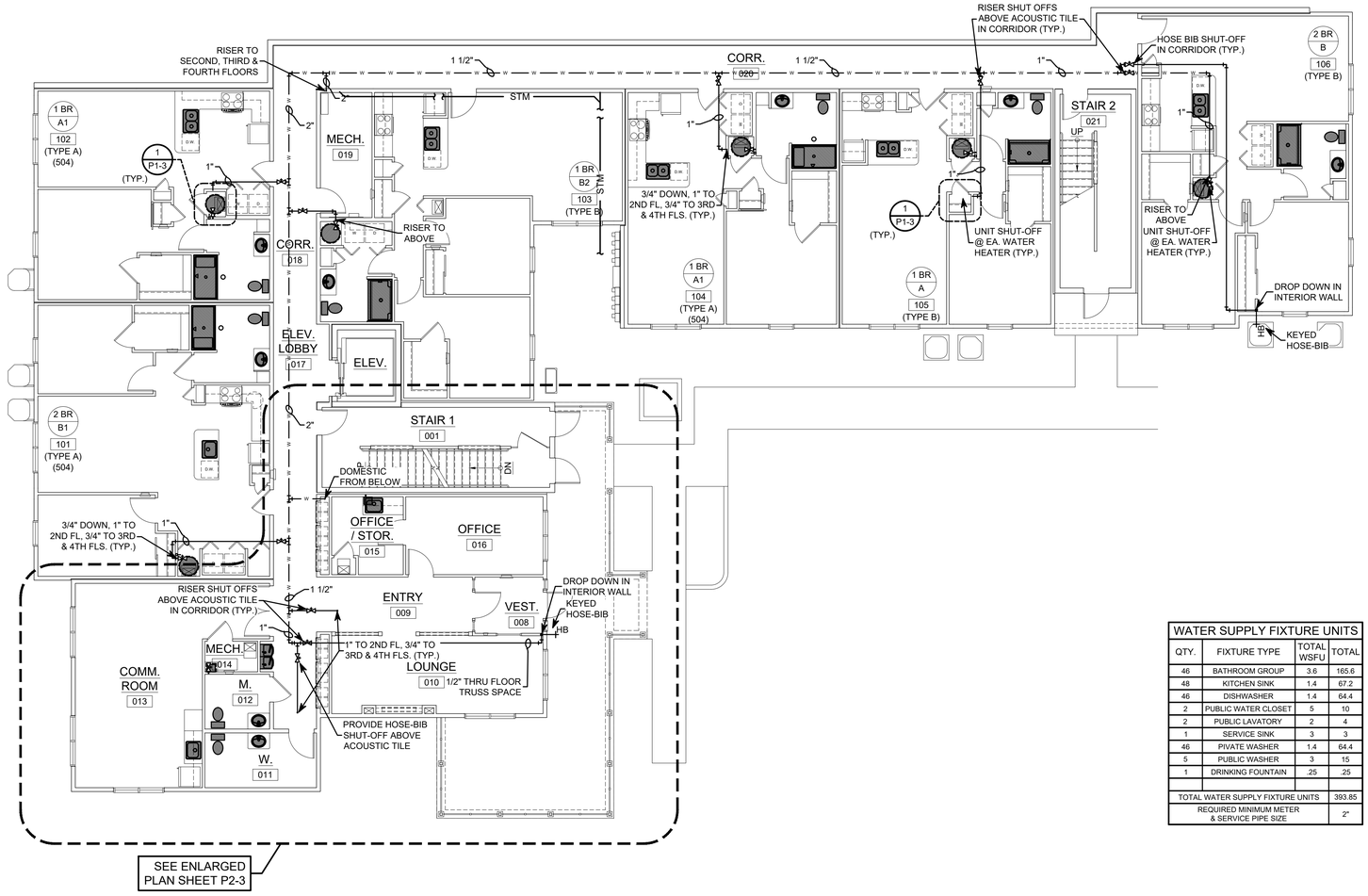

## WATER HEATER PLAN 2

SCALE: 3/4" = 1'-0"




## WATER HEATER DETAIL 1

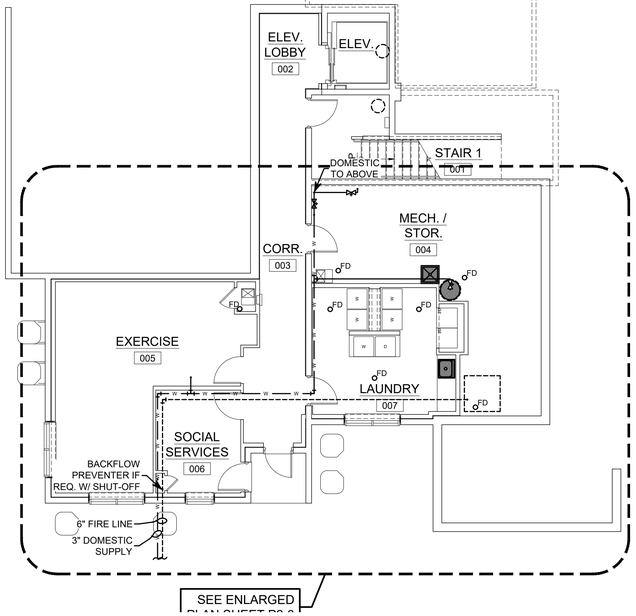
SCALE: 3/4" = 1'-0"




## FIRST FLOOR WATER PLAN

SCALE: 1/8" = 1'-0"

| WATER SUPPLY FIXTURE UNITS | | | |
|---|---|---|---|
| QTY. | FIXTURE TYPE | TOTAL WSFU | TOTAL |
| 46 | BATHROOM GROUP | 3.6 | 165.6 |
| 48 | KITCHEN SINK | 1.4 | 67.2 |
| 46 | DISHWASHER | 1.4 | 64.4 |
| 2 | PUBLIC WATER CLOSET | 5 | 10 |
| 2 | PUBLIC LAVATORY | 2 | 4 |
| 1 | SERVICE SINK | 3 | 3 |
| 46 | PIVATE WASHER | 1.4 | 64.4 |
| 5 | PUBLIC WASHER | 3 | 15 |
| 1 | DRINKING FOUNTAIN | .25 | .25 |
| | | | |
| TOTAL WATER SUPPLY FIXTURE UNITS | | | 393.85 |
| REQUIRED MINIMUM METER & SERVICE PIPE SIZE | | | 2" |




## GROUND FLOOR WATER PLAN

SCALE: 1/8" = 1'-0"

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PROJECT:
TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:
GROUND & FIRST FLOOR BUILDING WATER PLANS

GEORGE J. KONTOGIANNIS REGISTERED No. AR00034309 STATE OF INDIANA ARCHITECT

DATE: 06/26/2026
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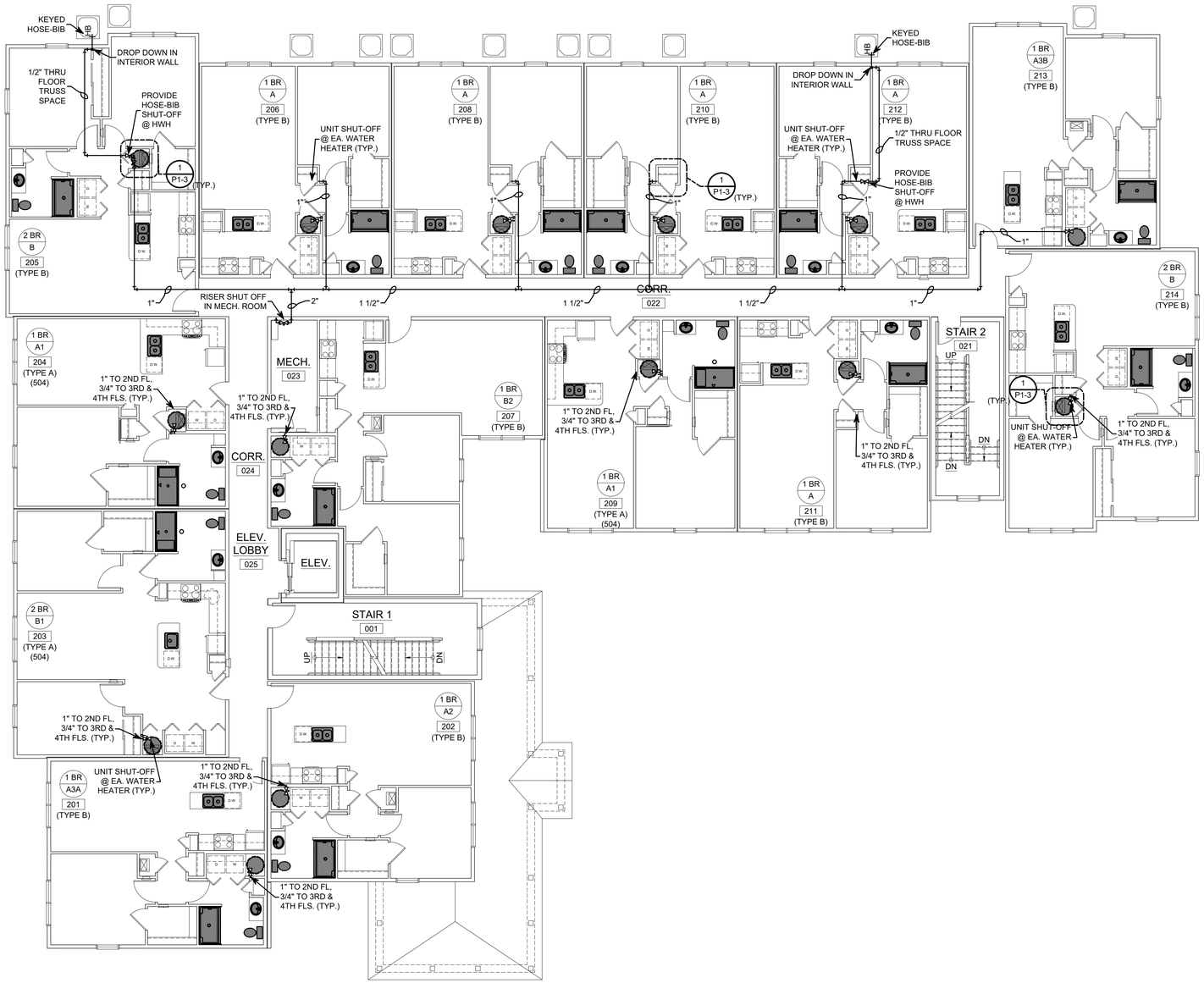


## SECOND FLOOR WATER PLAN

SCALE: 1/8" = 1'-0"


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PROJECT:

# TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

SECOND FLOOR BUILDING WATER PLAN

DATE: 06/26/2026
REVISED:

GEORGE J. KONTOGIANNIS REGISTERED No. AR00034309 STATE OF INDIANA ARCHITECT

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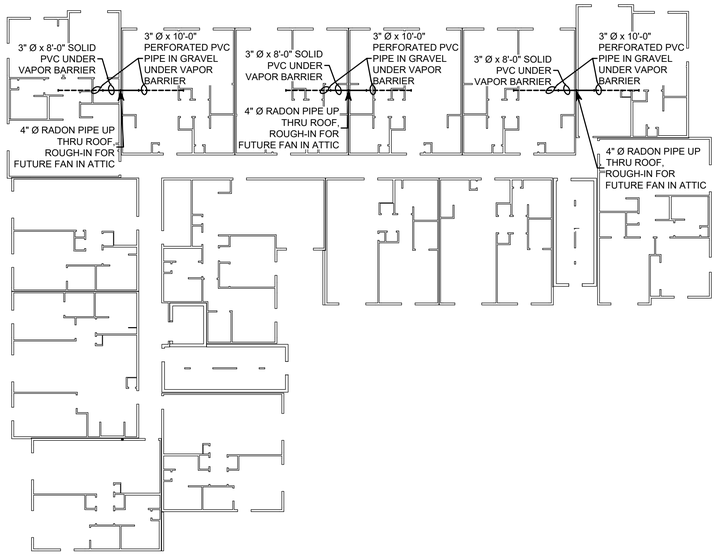
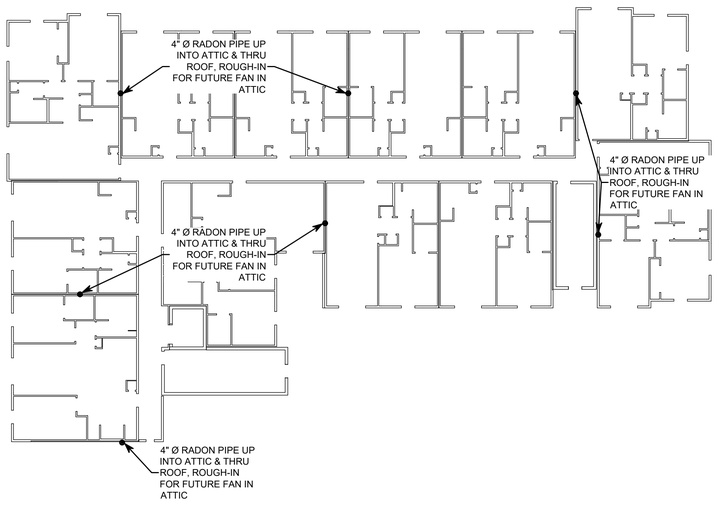


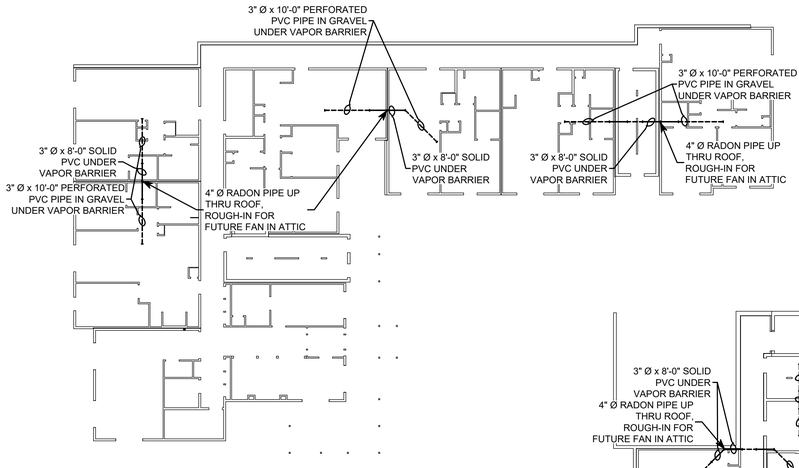

## BLDG. SECOND FL. RADON PLAN

SCALE: 1/16" = 1'-0"



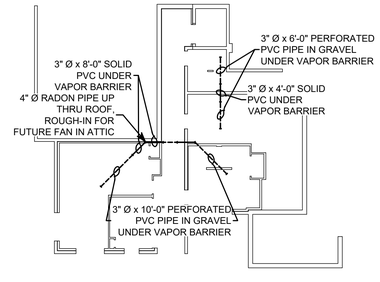

## BLDG. FOURHT FL. RADON PLAN

SCALE: 1/16" = 1'-0"




## BLDG. FIRST FL. RADON PLAN

SCALE: 1/16" = 1'-0"




## BLDG. GROUND FL. RADON PLAN

SCALE: 1/16" = 1'-0"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PROJECT:

TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

BUILDING RADON PLANS

DATE: 06/26/2026
REVISED:

GEORGE J. KONTOGIANNIS REGISTERED No. AR00034309 STATE OF INDIANA ARCHITECT


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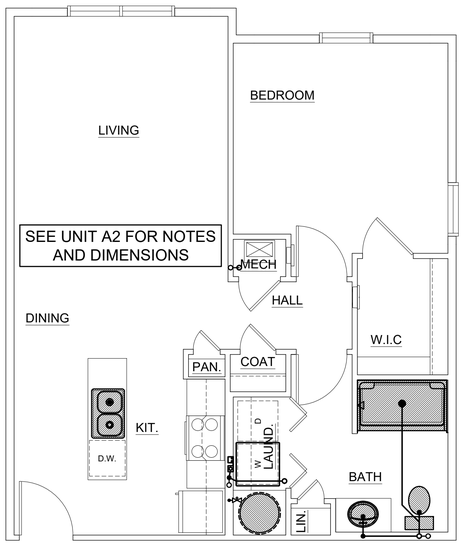
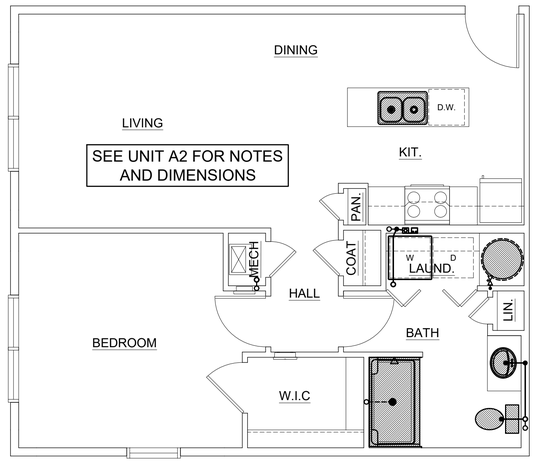


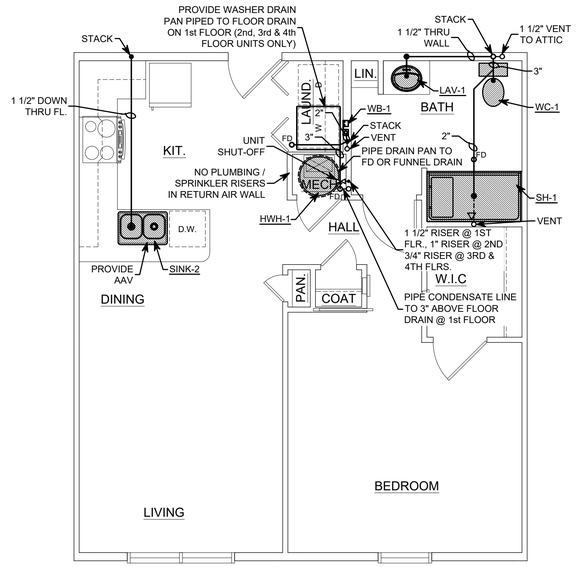

## ONE BEDROOM (TYPE B) UNIT A3B

SCALE: 1/4" = 1'-0"



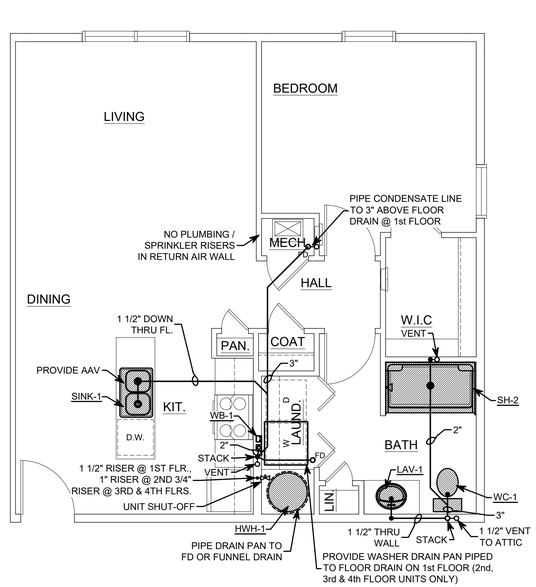

## ONE BEDROOM (TYPE B) UNIT A3A

SCALE: 1/4" = 1'-0"



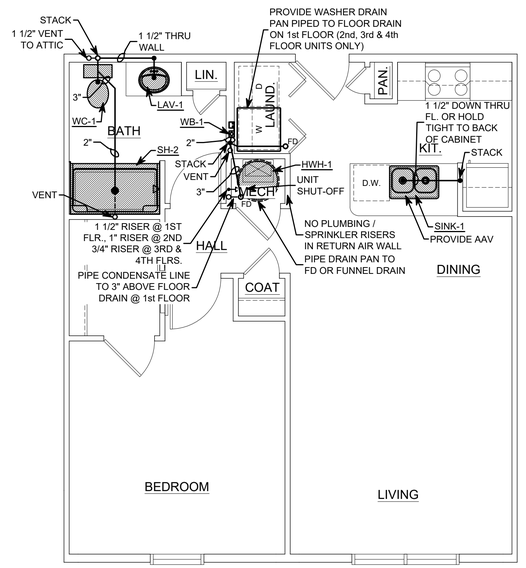

## ONE BEDROOM (TYPE A) (504) UNIT A1

SCALE: 1/4" = 1'-0"




## ONE BEDROOM (TYPE B) UNIT A2

SCALE: 1/4" = 1'-0"




## ONE BEDROOM (TYPE B) UNIT A

SCALE: 1/4" = 1'-0"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PROJECT:

TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

1/4" UNIT PLUMBING PLANS

DATE: 06/26/2026
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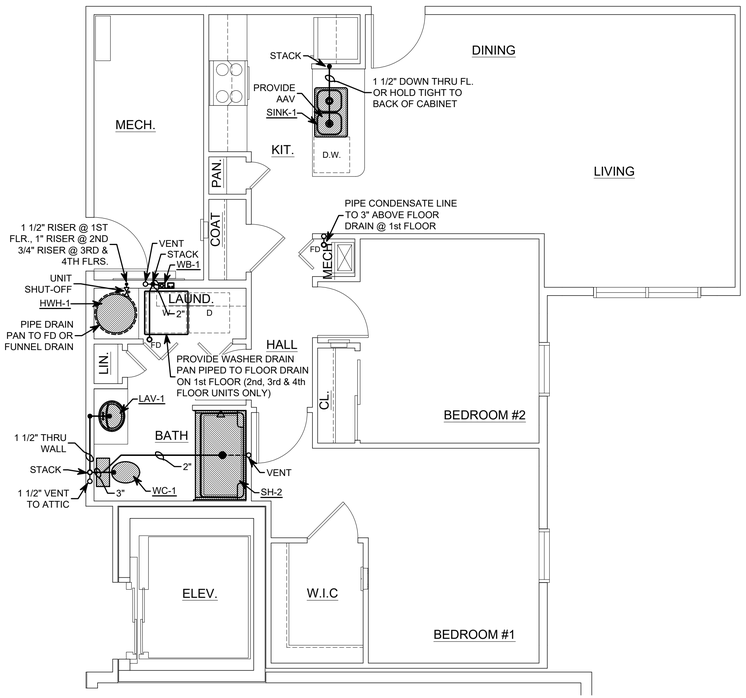
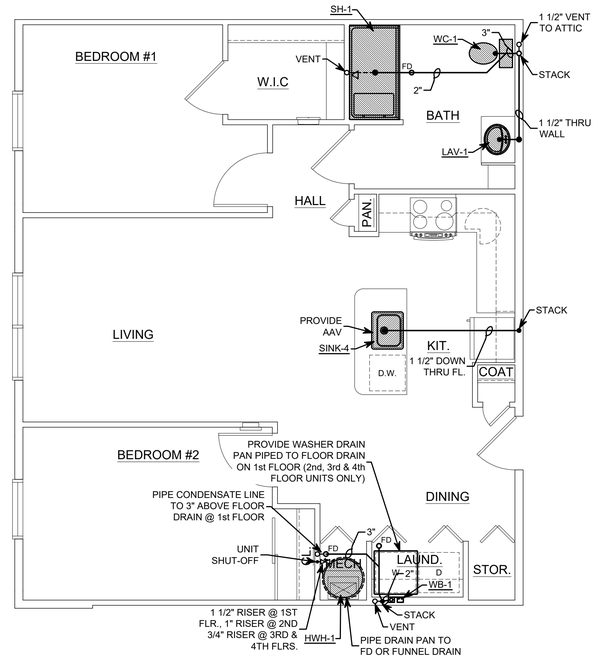


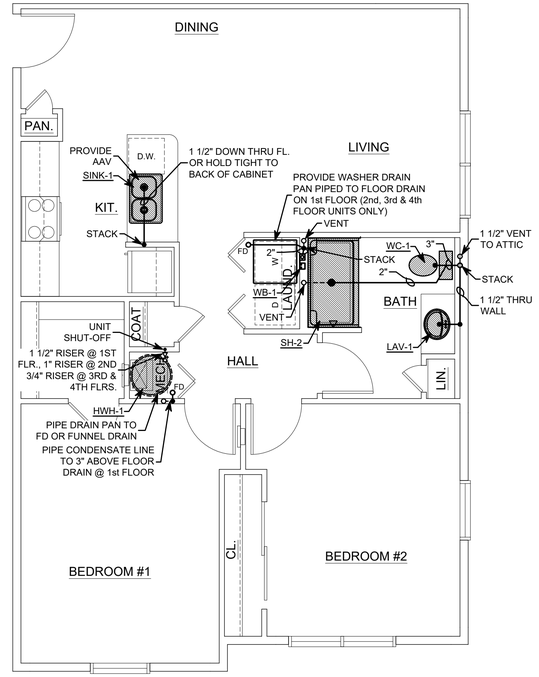

TWO BEDROOM (TYPE B) UNIT B2A

SCALE: 1/4" = 1'-0"




TWO BEDROOM (TYPE A) (504) UNIT B1

SCALE: 1/4" = 1'-0"




TWO BEDROOM (TYPE B) UNIT B

SCALE: 1/4" = 1'-0"

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PROJECT:

# TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

## 1/4" UNIT PLUMBING PLANS

DATE: 06/26/2026
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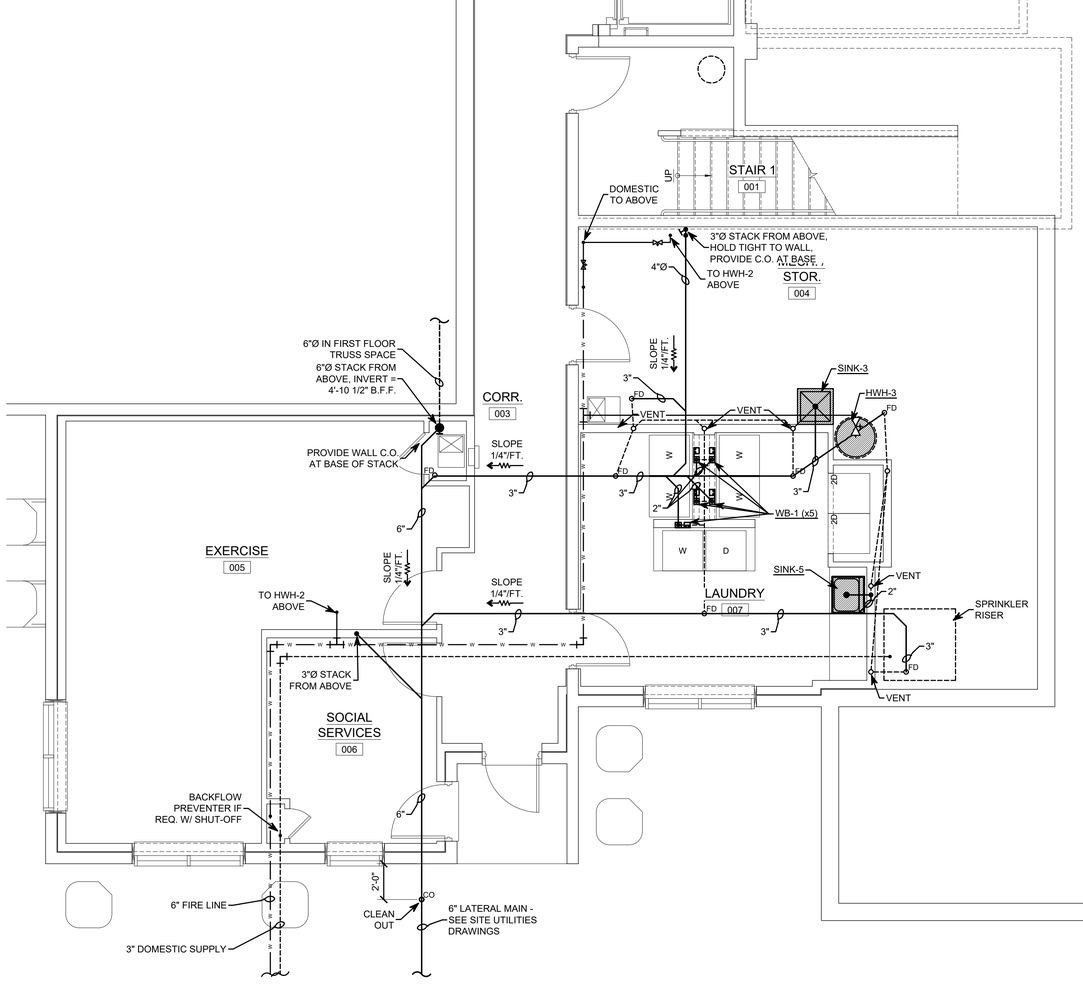
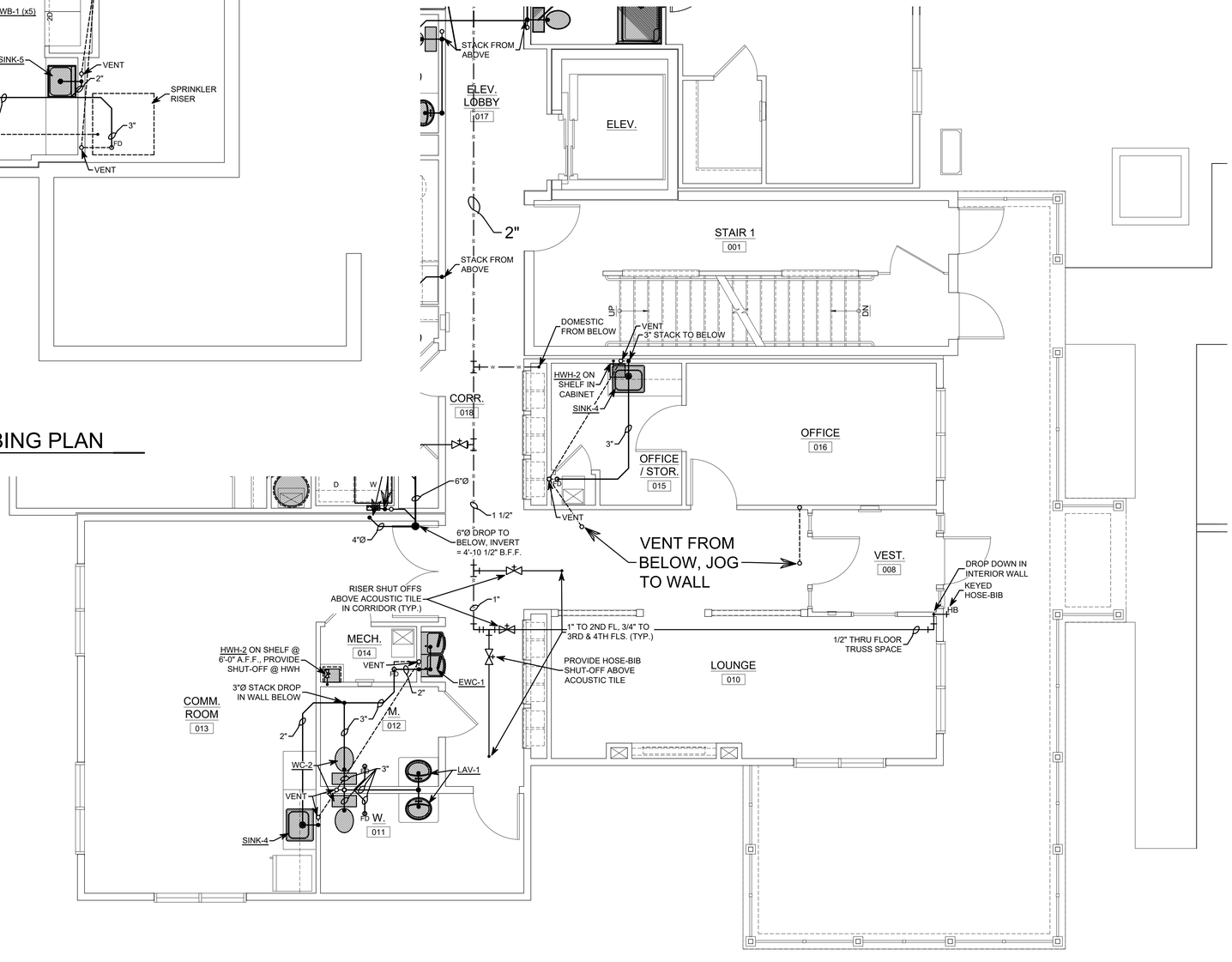



## ENLARGED GROUND FLOOR PLUMBING PLAN

SCALE: 1/4" = 1'-0"




## ENLARGED FIRST FLOOR PLUMBING PLAN

SCALE: 1/4" = 1'-0"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PROJECT:

# TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

ENLARGED GROUND & FIRST FLOOR PLUMBING PLANS

DATE: 06/26/2026
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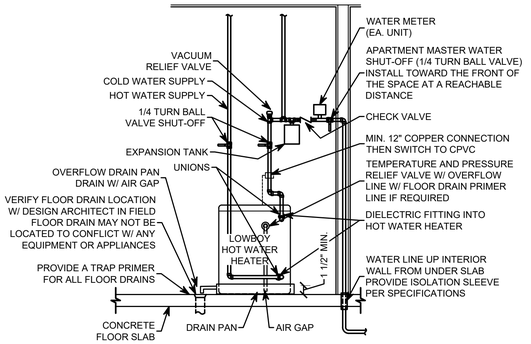
# PLUMBING NOTES

1. PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ALL PIPING, EQUIPMENT, VALVES, ETC. IN ACCORDANCE WITH CURRENT PLUMBING CODE, CITY, COUNTY CODES, OR THE STATE BOARD OF HEALTH REGULATIONS.
2. PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF A DOMESTIC COLD WATER SERVICE AND SANITARY BUILDING SEWER AS SHOWN ON THE DRAWINGS OR HEREIN DESCRIBED.
3. PLUMBING CONTRACTOR SHALL INSTALL NON-FREEZE VACUUM BREAKER SILLCOCKS WHERE SHOWN ON BUILDING PLAN. EACH BRANCH LINE SUPPLY TO SILLCOCK SHALL BE 3/4" AND SHALL HAVE AN INTERIOR SHUTOFF VALVE.
4. PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR RUNNING ALL PIPING CONCEALED IN APARTMENT UNITS. IF ANY FLOOR JOIST, TRUSSES, OR BEARING WALLS ARE CUT, PRIOR APPROVAL MUST BE GIVEN BY THE ARCHITECT.
5. PLUMBING CONTRACTOR SHALL PROTECT UNDERGROUND WATER LINES FROM CROSS-CONTAMINATION WITH SANITARY SEWERS IN ACCORDANCE WITH ACCEPTED INSTALLATION PRACTICES FOR SEPARATION AS RECOMMENDED BY THE STATE BOARD OF HEALTH AND COUNTY AND CITY STANDARDS.
6. ALL UNDERGROUND WATER LINES SHALL BE CPVC WITH NO FITTINGS BELOW SLAB. BRING LINES UP THROUGH SLAB AT HOT WATER HEATER. INSTALL UNIT TAKES-OFFS.
7. ALL WATER PIPING ABOVE SLAB SHALL BE CPVC.
8. PROVIDE MASTER SHUT-OFF FOR WATER SUPPLY TO EACH UNIT. SHUT-OFF SHALL BE LOCATED AS SHOWN AND SHALL SHUT-OFF WATER TO ALL UNIT PIPING.
9. DISHWASHER DISCHARGE SHALL BE PIPED THROUGH THE DISPOSAL OR THROUGH A DISHWASHER TAILPIECE "TEE".
10. PROVIDE DIELECTRIC UNION ON ALL HOT WATER HEATER CONNECTIONS. FINAL CONNECTIONS TO FAUCETS SHALL BE WITH A UNION OR COMPRESSION FITTING. ALL FIXTURES SHALL BE PROVIDED WITH A STOP PER CODE.
11. COORDINATE PIPING WITH CARPENTER. BE PARTICULARLY AWARE OF SECOND FLOOR SHOWER AND WATER CLOSET ROUGH-INS. THOSE SHALL BE COORDINATED WITH THE CARPENTER AND ERRORS IN FRAMING SHALL BE CORRECTED. WATER CLOSETS MAY NOT BE MOVED FROM LOCATIONS SHOWN.
12. PROVIDE LAUNDRY BOXES FOR ALL WASHER LOCATIONS. LAUNDRY BOX SHALL CONTAIN SHUT-OFF WITH THREADED HOSE CONNECTION FOR HOT AND COLD WATER (NO ELECTRICAL OUTLETS).
13. WATER PIPING SHALL BE SECURED TIGHTLY IN ALL LOCATIONS TO PREVENT ANY RATTLING. IF PRESSURE IS EXCESSIVE, PROVIDE DEAD END AIR CHAMBERS ABOVE SECOND FLOOR FIXTURE TO ACT AS AN AIR HAMMER.
14. PROVIDE TRAP PRIMERS IF REQUIRED BY CODE OR LOCAL GOVERNING AUTHORITY.
15. THE PLUMBING CONTRACTOR SHALL LEVEL ALL HOT WATER HEATERS.
16. THE PLUMBING CONTRACTOR SHALL REVIEW THE HEATING AND ELECTRICAL DRAWINGS TO VERIFY ANY AREAS OF CONFLICT WITH THESE TRADES. ALL AREAS OF CONFLICT SHALL BE WORKED OUT BEFORE INSTALLATION BEGINS. IF THIS CONTRACTOR INSTALLS HIS WORK WITHOUT COORDINATION, THE GENERAL CONTRACTOR MAY HAVE IT REMOVED IF THE G.C. FEELS THAT THE SITUATION IS UNWORKABLE FOR OTHER TRADES.
17. REVIEW ALL ITEMS OF EQUIPMENT SUPPLIED BY OTHERS TO DETERMINE EXACTLY WHAT IS BEING SUPPLIED AND WHAT HOOK-UPS AND ACCESSORIES ARE REQUIRED. IT SHALL BE THE RESPONSIBILITY OF THE PLUMBER TO PROVIDE ALL LABOR AND ACCESSORIES (I.E. VACUUM BREAKERS, BACKFLOW PREVENTERS, PRESSURE REDUCERS, UNIONS, STOPS, TRAPS, ETC.) NEEDED FOR A COMPLETE INSTALLATION BUT NOT SUPPLIED WITH THE EQUIPMENT. ANY AREAS IN QUESTION SHALL BE REVIEWED WITH THE GENERAL CONTRACTOR FOR CLARIFICATION.
18. ALL FLOOR DRAINS SHALL BE SET 3/4" BELOW SLAB LEVEL. CONCRETE SUBCONTRACTOR SHALL SLOPE FLOOR TO DRAINS.
19. PROVIDE DRAIN PANS UNDER ALL WATER WATER HEATERS. DRAIN LINE FROM PAN SHALL BE TIED INTO 2ND FLOOR FUNNEL DRAIN LINE IN JOIST SPACE BELOW. ALL FIRST FLOOR DRAIN PANS SHALL PIPE TO FLOOR DRAIN.
20. SHOWERS ON SECOND & THIRD FLOOR UNITS SHALL BE SET ON 1" PLYWOOD. WATER CLOSET ROUGH-IN SHALL BE SET UP 1" & SECURED TO ALLOW FOR 3/4" FLOOR FILL

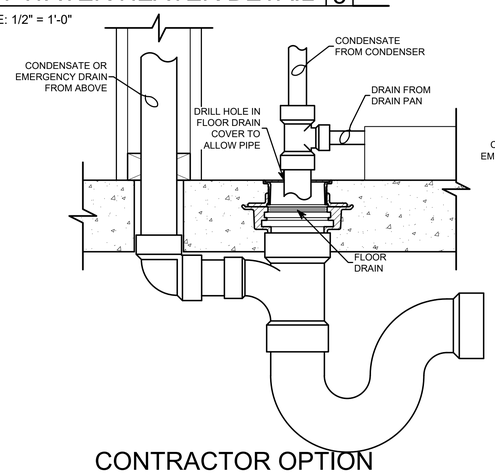
# PLUMBING FIXTURE SCHEDULE

| ITEM | DESCRIPTION | ROUGH IN | | | | MANUF. | MODEL | MTG. | MAT. | COLOR | FAUCET/ FLUSH VALVE | SUPPLIES & STOPS | ACCESSORIES | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | DRAIN | VENT | HOT | COLD | | | | | | | | | |
| WC-1 | WATER CLOSET | 3" | 1 1/2" | | 1/2" | AMERICAN STANDARD | CADET PRO RIGHT-HEIGHT, MODEL 215AA 104.020 | FLOOR | VIT. CHINA | WHITE | 4" NON-ADJ PISTON ACTION ACCELERATOR | 1/4 TURN STOP | 1.28 GPF WC - BEMIS 170 CLOSED FRONT SEAT W/ COVER | ADA COMPLIANT |
| WC-2 | WATER CLOSET | 3" | 1 1/2" | | 1/2" | AMERICAN STANDARD | CADET PRO RIGHT-HEIGHT, MODEL 215AA 104.020 | FLOOR | VIT. CHINA | WHITE | 4" NON-ADJ PISTON ACTION ACCELERATOR | 1/4 TURN STOP | 1.28 GPF WC - BEMIS 1955 SPLIT SEAT NO COVER | ADA COMPLIANT |
| LAV-1 | LAVATORY | 1 1/4" | 1 1/4" | 3/8" OD | 3/8" OD | MANSFIELD | MS OVAL 237 | COUNT. TOP | VIT. CHINA | WHITE | MOEN-CHATEAU L4621 WITH POP-UP | 1/4 TURN STOP W/ BRAIDED S.S. SUPPLY | DEARBORN 9702 P-TRAP | |
| SINK-1 | KITCHEN SINK DOUBLE BOWL | 1 1/2" | 1 1/2" | 3/8" OD | 3/8" OD | DAYTON | DAYTON D23322 | SELF RIMMING | STAIN STEEL | | MOEN-CHATEAU 7425 LEVER HANDLE | 1/4 TURN STOP W/ BRAIDED S.S. SUPPLY | BASKET STRAINER, DECK GASKET DEARBORN 9702 & 9108, DISPOSAL - INSINKERATOR - BADGER 5 | PROVIDE CORD W/ PLUG FOR DISPOSAL |
| SINK-2 | KITCHEN SINK DOUBLE BOWL | 1 1/2" | 1 1/2" | 3/8" OD | 3/8" OD | DAYTON | DAYTON GE23322 | SELF RIMMING | STAIN STEEL | | MOEN-CHATEAU 7425 LEVER HANDLE | 1/4 TURN STOP W/ BRAIDED S.S. SUPPLY | BASKET STRAINER, DECK GASKET DEARBORN 9702 & 9108, DISPOSAL - INSINKERATOR - BADGER 5 | PROVIDE CORD W/ PLUG FOR DISPOSAL - CENTER REAR DRAIN LOCATION |
| SINK-3 | JANITOR'S SINK | 3" | 1 1/2" | 1/2" | 1/2" | FIAT | MSB 2424 | FLOOR | MOLDED STONE | WHITE | FIAT 830-AA (WALL MOUNTED) | 1/4 TURN STOP W/ BRAIDED S.S. SUPPLY | HOSE BRACKET & HOSE 832-AA STRAINER 1453-BB | |
| SINK-4 | KITCHEN SINK SINGLE BOWL | 1 1/2" | 1 1/2" | 3/8" OD | 3/8" OD | DAYTON | DAYTON GE12521 | SELF RIMMING | STAIN STEEL | | MOEN-CHATEAU 7425 LEVER HANDLE | 1/4 TURN STOP W/ BRAIDED S.S. SUPPLY | BASKET STRAINER, DECK GASKET DEARBORN 9702 & 9108, DISPOSAL - INSINKERATOR - BADGER 5 | PROVIDE CORD W/ PLUG FOR DISPOSAL - CENTER REAR DRAIN LOCATION |
| SINK-5 | LAUNDRY SINK | 1 1/2" | 1 1/2" | 3/8" OD | 3/8" OD | FIAT | DL1 | DROP-IN | MOLDED STONE | WHITE | MOEN-CHATEAU 7425 LEVER HANDLE | | | DROP-IN MOULDED STONE W/ FAUCET W/ LEVER HANDLES |
| BATH-1 | BATH & WALL SURROUND | 1 1/2" | 1 1/4" | 1/2" IPS | 1/2" IPS | STERLING | PERFORMA SERIES 7104 | FLOOR | FIBER GLASS | WHITE | MOEN POSI-TEMP CHATEAU L2363 | DEARBORN 9226 PLASTIC | POSI-TEMP VLAVE WITH STOPS AND #TL-183 TRIM | PROVIDE BLOCKING IN TUBWALL AS SHOWN ON DRAWINGS |
| SH-1 | SHOWER 63" W/ SEAT | 2" | 1 1/2" | 1/2" | 1/2" | CLARION | MP6333BF34 | FLOOR | FIBER GLASS | WHITE | MOEN POSI-TEMP CHATEAU L2352 | | PROVIDE ACCESSORIES TO MEET ADA REQUIREMENTS | |
| SH-2 | SHOWER 60"x32" | 2" | 1 1/2" | 1/2" | 1/2" | STERLING | ENSEMBLE 72180116-0 | FLOOR | FIBER GLASS | WHITE | MOEN POSI-TEMP CHATEAU L2352 | | POSI-TEMP VALVE W/ STOPS AND #TL-182 TRIM | WITH BACKERBOARDS |
| HWH-1 | HOT WATER HEATER | | | | | A. O. SMITH | ENJB-4 UEF=0.94 LOWBOY | | | | | SHUT-OFF W/ UNIONS | PROVIDE W/ WATTS TEMP., PRESSURE RELIEF VALVE, DRAIN PAN, EXPANISION TANK & SIDE CONNECTION | 40 GAL., ELECTRIC, LOW BOY, BACK-FLOW PREVENTER |
| HWH-2 | HOT WATER HEATER | | | | | A. O. SMITH | EPU-2.5 POINT-OF-USE | | | | | SHUT-OFF W/ UNIONS | | 2.5 GAL., ELECTRIC, POINT-OF-USE, 98% EFF, 1,440 WATTS 12" D X 14.5" H, SHELF MOUNTED |
| HWH-3 | LAUNDRY ROOM HOT WATER HEATER | | | | | A. O. SMITH | DVE 80-18 | | | | | SHUT-OFF W/ UNIONS | PROVIDE W/ WATTS TEMP., PRESSURE RELIEF VALVE, DRAIN PAN, EXPANSION TANK | 80 GAL., 15 KW, 88 GPH RECOVERY, 41.6 AMPS, 208 VOLT, 3 PHASE |
| WB-1 | WASHER BOX | 2" | 1 1/4" | 1/2" IPS | 1/2" IPS | SIOUX CHIEF | 696-2303CF | WALL | PLASTIC | WHITE | | | | |
| EWC-1 | ELECTRIC WATER COOLER | 2" | 1 1/2" | | 1/2" | ELKAY | LZSTLG8LC | WALL | | | | | | |
| HB | HOSE BIB | | | | | WOODFORD | MODEL 19 | WALL | | | | | SL-19 STEM LOCK FOR EACH HOSE BIB | |
| | | | | | | | | | | | | | | |



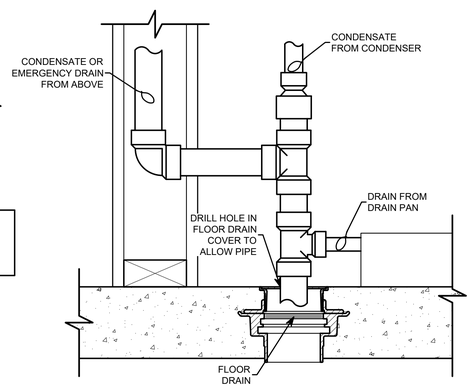

## HOT WATER HEATER DETAIL 3

SCALE: 1/2" = 1'-0"



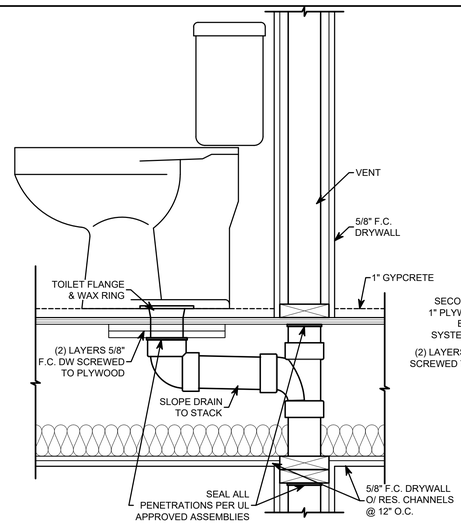

## CONTRACTOR OPTION INDIRECT DRAIN DETAIL 5

SCALE: 3" = 1'-0"



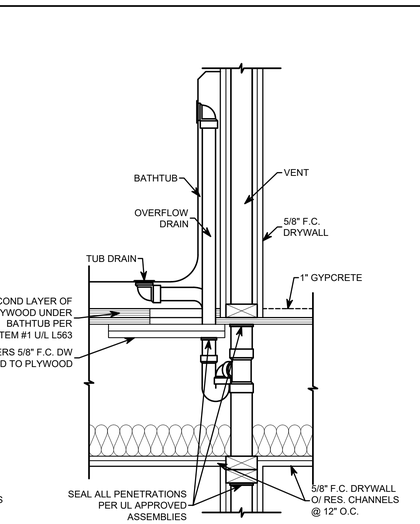

## INDIRECT DRAIN DETAIL 4

SCALE: 3" = 1'-0"




## TYPICAL TOILET DETAIL 2

SCALE: 3" = 1'-0"




## TYPICAL BATH DETAIL 1

SCALE: 3" = 1'-0"

# PLUMBING SYMBOLS

| | |
|---|---|
| SAN | SANITARY WASTE PIPING |
| | SANITARY VENT PIPING |
| STM | STORM WATER PIPING |
| DCW | DOMESTIC COLD WATER |
| DHW | DOMESTIC HOT WATER |
| DHWR | DOMESTIC HOT WATER RETURN |
| GAS | GAS |
| | GATE VALVE |
| | GLOBE VALVE |
| | CHECK VALVE |
| | SHUT-OFF VALVE |
| | UNION |
| | THERMOMETER |
| | BALANCING VALVE |
| | PRESSURE GAUGE |
| | CAP ON END OF PIPE |
| | PRESSURE-TEMP. RELIEF VALVE |
| | RISER DOWN |
| | RISER UP |
| FP | MAIN SUPPLY - FIRE PROTECTION |
| | SPRINKLER HEAD (PENDANT) |
| | SPRINKLER HEAD (UPRIGHT IN ATTIC) |
| | SPRINKLER HEAD (WALL MTD.) |
| CO | CLEANOUT (FLOOR) |
| CO | CLEANOUT (WALL) |
| FD | FLOOR DRAIN |
| RD | ROOF DRAIN |
| | FROST PROOF HOSE BIBB |

## APPLICABLE BUILDING CODES

2014 INDIANA BUILDING CODE & ALL REFERENCED CODES
2012 INDIANA PLUMBING CODE


KONTOGIANNIS & ASSOCIATES
ARCHITECTURE
PLANNING
DESIGN

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43215-5492

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E-MAIL: architects@kontogiannis.com

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025


PROJECT:

TANNER'S CREEK MANOR

DRAWING TITLE:

PLUMBING FIXTURE SCHEDULE, NOTES & DETAILS

DATE: 06/26/2026
REVISED:

GEORGE J. KONTOGIANNIS REGISTERED No. AR00034309 STATE OF INDIANA ARCHITECT

GEORGE J. KONTOGIANNIS, LICENSE #AR00034309
EXPIRATION DATE 12/31/2027


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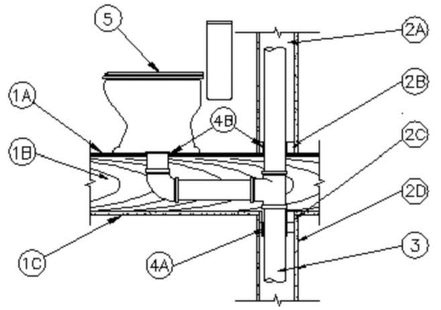
- ☐ SUBMISSION SET 06/27/2025
- ☐ ZONING SET 05/07/2026
- ■ BID SET 06/26/2026
- ☐ PERMIT SET
- ☐ CONSTRUCTION SET

P3-1


H:\Projects\Architects\Current\Tanner's Creek Manor - IN Tax Credit - Spire\AutoCAD\P3-1.dwg, 6/26/2026 2:09:00 PM, MH

**System No. F-C-2095**
April 08, 2008
F Rating -- 1 Hr
T Ratings -- 3/4 and 1 Hr (See Item 4)




1.**Floor-Ceiling Assembly** -- The 1 hr fire-rated solid or trussed lumber joist floor-ceiling assembly shall be constructed of the materials and in the manner specified in the individual L500 Series Floor-Ceiling Designs in the UL Fire Resistance Directory, as summarized below:

A. **Flooring System --** Lumber or plywood subfloor with finish floor of lumber plywood or **Floor Topping Mixture*** as specified in the individual Floor-Ceiling Design. Diam of opening is dependent on the pipe size. See Item 4.

B. **Wood Joists* --** Nom 10 in. (254 mm) deep (or deeper) lumber, steel or combination lumber and steel joists, trusses or **Structural Wood Members*** with bridging as required and with ends firestopped.

C. **Gypsum Board* --** Min 5/8 in. (16 mm) thick as specified in the individual Floor-Ceiling Design. Gypsum board nailed to wood joists.

2.**Chase Wall --** The through penetrants (Item 3) are routed through a fire-rated single, double or staggered wood stud/gypsum wallboard chase wall constructed of the material and in the manner specified in the individual U300 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:

A. **Studs --** Nom 2 by 6 in. (51 by 152 mm) or double 2 by 4 in. (51 by 102 mm) lumber studs.

B. **Sole Plate --** Nom 2 by 6 in. (51 by 152 mm) or parallel 2 by 4 in. (51 by 102 mm) lumber plates, tightly butted. Diam of opening is dependent on the pipe size. See Item 4.

C. **Top Plate --** The double top plate shall consist of two 2 by 6 in. (51 by 152 mm) or two sets of parallel 2 by 4 in. (51 by 102 mm) lumber plates, tightly butted. Diam of opening is dependent on the pipe size. See Item 4.

D. **Gypsum Board* --** Thickness, type, number of layers and fasteners shall be as specified in individual Wall and Partition Design.

3.**Nonmetallic Pipe --** One nonmetallic vent pipe provided with sanitary tee and branch drain pipe with toilet flange to be centered within the firestop system. Pipe or conduit to be rigidly supported on both sides of floor assembly. The following types and sizes of nonmetallic pipes, fittings and flanges may be used:

A. **Polyvinyl Chloride (PVC) Pipe --** Nom 4 in. (102 mm) diam (or smaller) Schedule 40 solid core or cellular core PVC pipe for use in vented (drain, waste or vent) piping system.

B. **Chlorinated Polyvinyl Chloride (CPVC) Pipe --** Nom 4 in. (102 mm) diam (or smaller) SDR17 CPVC pipe for use in vented (drain, waste or vent) piping systems.

C. **Acrylonitrile Butadiene Styrene (ABS) Pipe --** Nom 3 in. (76 mm) diam (or smaller) Schedule 40 solid core or cellular core ABS pipe for use in vented (drain, waste or vent) piping systems.

4.**Firestop System --** The firestop system shall consist of the following:

A. **Fill, Void or Cavity Materials - Wrap Strip --** Nom 1/8 in. (3.2 mm) thick intumescent material supplied in 2 in. (51 mm) wide strips. The number of layers of wrap strips is dependent on the size of the pipe, as shown in the table below. The layers of wrap strip are individually wrapped tightly around penetrant with the ends butted and held in place with aluminum foil tape. Butted ends of successive layers may be staggered or aligned. Layers of wrap strip to be recessed into opening with the bottom surface of wrap strips extending 1-/2 to 1 in. (13 to25 mm) below bottom of lower top plate.

**PASSIVE FIRE PROTECTION PARTNERS** -- WS1

B. **Fill, Void or Cavity Material*-Sealant --** Min 3/4 in. (19 mm) thickness of fill material applied within an annulus, flush with top surface of floor or sole plate. Min 5/8 in. (16 mm) thickness of fill material applied within any annular space between the wrap strip and edge of opening, flush with the bottom of lower top plate.

**PASSIVE FIRE PROTECTION PARTNERS** -- 3600EX

C. **Foil Tape --** (Not shown) - Nom 4 mil by 4 in. (102 mm) wide foil tape wrapped tightly around the exposed portion of the wrap strip and overlapped onto lower top plate and pipe a min 1 in. (25 mm).

| Nom Pipe Size In. (mm) | Pipe Type | Diam of Opening In. (mm) | Number or Wrap Strip Layers | T Rating Hr |
|---|---|---|---|---|
| 3 (76) | PVC, CPVC, ABS | 4-1/2 (114) | 4 | 1 |
| 4 (102) | PVC, CPVC, | 5-1/2 (114) | 5 | 3/4 |

5. **Water Closet** -- Floor mounted vitreous china water closet.

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

Last Updated on 2008-04-08

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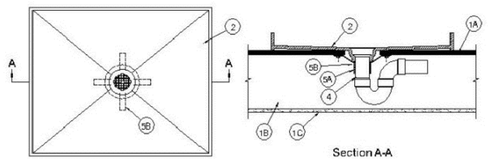
FLOOR PENETRATION
U.L. SYSTEM NO. F-C-2095

**System No. F-C-2351**
January 12, 2009
F Rating -- 1 Hr
T Rating -- 1 Hr




1.**Floor-Ceiling Assembly** -- The 1 hr fire-rated wood joist floor-ceiling assembly shall be constructed of the materials and in the manner specified in the individual L500 Designs in the UL Fire Resistance Directory, as summarized below:

A. **Flooring System --** Lumber or plywood subfloor with finish floor of lumber, plywood or **Floor Topping Mixture*** as specified in the individual Floor-Ceiling Design. Max diam of opening is 6 in. (152 mm).

B. **Wood Joists --** Nom 10 in. (254 mm) deep (or deeper) lumber, steel or combination lumber and steel joists, trusses or **Structural Wood Members*** with bridging as required and with ends firestopped.

C. **Gypsum Board* --** Thickness, type, number of layers and fasteners as required in the individual Floor-Ceiling Design.

2.**Plastic Plumbing Fixtures+ - Shower Base Receptor --** One-piece molded nonmetallic shower base receptor with stainless steel drain plate. Shower base receptor to be installed in accordance with the manufacturer's instructions.

**TILE-REDI USA L L C** -- Model 3360L, 3360R, 37NEO, 3737, 4837, 4837ADA, 4837MB or 4848

3.**Tile --** (Not Shown) - Ceramic or stone tile applied to shower pan floor with epoxy adhesive in accordance with shower base receptor installation instructions.

4.**Nonmetallic Pipe --** Nom 2 in. (51 mm) diam Schedule 40 solid or cellular core PVC pipe solvent-welded into drain in the bottom of the shower base receptor and centered in the floor opening.

5.**Firestop System --** The details of the firestop system shall be as follows:

A. **Fill, Void or Cavity Materials* - Wrap Strip --** Nom 1/8 in. (3.2 mm) thick intumescent material supplied in 2 in. (51 mm) wide strips. Single layer of wrap strip tightly wrapped around nonmetallic drain pipe (Item 4) with a butted seam and with the top edge of the wrap strip abutting the hub of the shower drain. Wrap strip layer temporarily held in position using tape.

**3M COMPANY 3M FIRE PROTECTION PRODUCTS** -- Ultra GS

B. **Steel Collar --** Nom 2 in. (51 mm) deep collar with 1-1/4 in. (32 mm) wide by 2 in. (51 mm) long anchor tabs and tabs to retain wrap strip layer. Coils of precut 0.016 in. (0.41 mm) thick (28 gauge) galv sheet steel available from wrap strip manufacturer. Steel collar, with anchor tabs bent outward 90 deg, wrapped tightly around wrap strip with min 1 in. (25 mm) overlap at seam. Anchor tabs to be pressed tightly against hub of shower drain and collar to be compressed around wrap strip using a min 1/2 in. (13 mm) wide stainless steel clamp at the collar midheight. Collar to be secured to underside of flooring system with steel screws with min 1-1/4 in. (32 mm) diam steel washers in conjunction with steel extension straps. Hanger tab extension straps to be fabricated from min 0.022 in. (0.6 mm) thick galv sheet steel. Taper straps from 1/4 in. (6 mm) wide to 1 in. (25 mm) wide with sufficient length to allow 1-1/2 to 2 in. (38 to 51 mm) lap onto floor. Straps secured to collar by inserting min 1 in. (25 mm) length of 1/4 in. (6 mm) wide end into hole on mounting tab and bending 180 degrees. Min of two anchor screws, diametrically opposed, are required.

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

Last Updated on 2009-01-12

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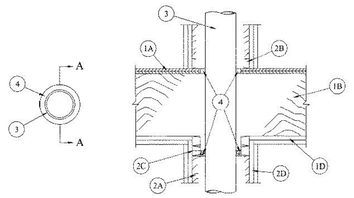
FLOOR PENETRATION
U.L. SYSTEM NO. F-C-2351

**System No. F-C-1009**
MARCH 08, 2018

**F Ratings -- 1 and 2 Hr (See Item 1)**

**T Ratings -- 1/4 Hr (See Item 1)**

| ANSI/UL1479 (ASTM E814) | CAN/ULC S115 |
|---|---|
| F Rating — 1 and 2 Hr (See Item 1) | F Rating — 1 and 2 Hr (See Item 1) |
| T Rating — 1/4 Hr | FT Rating — 1/4 Hr |
| L Rating At Ambient — Less Than 1 CFM/sq ft | FH Rating — 1 and 2 Hr (See Item 1) |
| L Rating At 400 F — 4 CFM/sq ft | FTH Rating — 1/4 Hr |
| | L Rating At Ambient — Less Than 1 CFM/sq ft |
| | L Rating At 400 F — 4 CFM/sq ft |




1.**FLOOR-CEILING ASSEMBLY --** THE 1 OR 2 HR FIRE-RATED SOLID OR TRUSSED LUMBER JOIST FLOOR-CEILING ASSEMBLY SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER SPECIFIED IN THE INDIVIDUAL L500 SERIES FLOOR-CEILING DESIGNS IN THE UL FIRE RESISTANCE DIRECTORY. **THE F RATING OF THE FIRESTOP SYSTEM IS EQUAL TO THE RATING OF THE FLOOR-CEILING ASSEMBLY.** THE GENERAL CONSTRUCTION FEATURES OF THE FLOOR-CEILING ASSEMBLY ARE SUMMARIZED BELOW:

A. **FLOORING SYSTEM --** LUMBER OR PLYWOOD SUBFLOOR WITH FINISH FLOOR OF LUMBER, PLYWOOD OR **FLOOR TOPPING MIXTURE*** AS SPECIFIED IN THE INDIVIDUAL FLOOR-CEILING DESIGN. DIAM OF OPENING TO BE MAX 1 IN. (25 MM) LARGER THAN DIAM OF PIPE. AS AN ALTERNATE, THE OPENING MAY BE SQUARE-CUT WITH A MAX DIMENSION 1 IN. (25 MM) GREATER THAN THE DIAM OF THE PIPE.

B. **WOOD JOISTS* --** NOM 10 IN. (254 MM) DEEP (OR DEEPER) LUMBER, STEEL OR COMBINATION LUMBER AND STEEL JOISTS, TRUSSES OR **STRUCTURAL WOOD MEMBERS*** WITH BRIDGING AS REQUIRED AND WITH ENDS FIRESTOPPED.

C. **FURRING CHANNELS --** (NOT SHOWN) --(AS REQUIRED ) RESILIENT GALVANIZED STEEL FURRING INSTALLED IN ACCORDANCE WITH THE MANNER SPECIFIED IN THE INDIVIDUAL L500 SERIES DESIGNS IN THE FIRE RESISTANCE DIRECTORY.

D. **GYPSUM BOARD* --** THICKNESS, TYPE, NUMBER OF LAYERS AND FASTENERS SHALL BE AS SPECIFIED IN THE INDIVIDUAL FLOOR-CEILING DESIGN. DIAM OF OPENING TO BE MAX 1 IN. (25 MM) LARGER THAN DIAM OF PIPE.

2.**CHASE WALL --** (OPTIONAL) - THE THROUGH PENETRANT (ITEM 3) MAY BE ROUTED THROUGH A FIRE RATED OR NON-RATED SINGLE, DOUBLE, OR STAGGERED WOOD STUD/GYPSUM BOARD CHASE WALL. DEPTH OF CHASE WALL TO BE MIN 1 IN. GREATER THAN THE DIAMETER OF THE THROUGH PENETRANT. THE CHASE WALL SHALL BE CONSTRUCTED TO INCLUDE THE FOLLOWING CONSTRUCTION FEATURES:

A. **STUDS --** NOM 2 BY 4 IN. (51 BY 102 MM), 2 BY 6 IN. (51 BY 152 MM) OR DOUBLE NOM 2 BY 4 IN. (51 BY 102 MM) LUMBER STUDS. NOM 2 BY 4 IN. (51 BY 102 MM) STUDS ARE ALLOWED FOR THROUGH-PENETRANTS (ITEM 3) NOT EXCEEDING NOM 2 IN. (51 MM) DIAM.

B. **SOLE PLATE --** NOM 2 BY 4 IN. (51 BY 102 MM), 2 BY 6 IN. (51 BY 152 MM) OR PARALLEL 2 BY 4 IN. (51 BY 102 MM) LUMBER PLATES, TIGHTLY BUTTED. DIAM OF OPENING IS TO BE MAX 1 IN. (925 MM) LARGER THAN DIAM OF PIPE. AS AN ALTERNATE, THE OPENING MAY BE SQUARE-CUT WITH A MAX DIMENSION 1 IN. (25 MM) GREATER THAN THE DIAM OF THE PIPE. PLATES MAY BE DISCONTINUOUS OVER OPENING, TERMINATING AT TWO OPPOSING EDGES OF OPENING. MAX LENGTH OF DISCONTINUITY TO BE 1 IN. (25 MM) GREATER THAN DIAM OF THROUGH PENETRANT.

C. **TOP PLATE --** THE DOUBLE TOP PLATE SHALL CONSIST OF TWO NOM 2 BY 4 IN. (51 BY 102 MM), 2 BY 6 IN. (51 BY 152 MM) OR TWO SETS OF PARALLEL 2 BY 4 IN. (51 BY 102 MM) LUMBER PLATES, TIGHTLY BUTTED. DIAM OF OPENING IS TO BE MAX 1 IN. (25 MM) LARGER THAN DIAM OF PIPE. AS AN ALTERNATE, THE OPENING MAY BE SQUARE-CUT WITH A MAX DIMENSION 1 IN. (25 MM) GREATER THAN THE DIAM OF THE PIPE. PLATES MAY BE DISCONTINUOUS OVER OPENING, TERMINATING AT TWO OPPOSING EDGES OF OPENING. MAX LENGTH OF DISCONTINUITY TO BE 1 IN. (25 MM) GREATER THAN DIAM OF THROUGH PENETRANT.

D. **GYPSUM BOARD* --** ONE OR TWO LAYERS OF MIN 1/2 IN. (13 MM) GYPSUM BOARD.

E. **STEEL PLATE --** (NOT SHOWN) WHEN LUMBER PLATES ARE DISCONTINUOUS, NOM 1-1/2 IN. (38 MM) WIDE NO. 20 GAUGE (OR HEAVIER) GALV STEEL PLATES SHALL BE INSTALLED TO CONNECT EACH DISCONTINUOUS LUMBER PLATE AND TO PROVIDE A FORM FOR THE FILL MATERIAL. STEEL PLATES SIZED TO LAP 2 IN. (51 MM) ONTO EACH DISCONTINUOUS LUMBER PLATE AND SECURED TO LUMBER PLATES WITH STEEL SCREWS OR NAILS.

3.**THROUGH PENETRANTS --** ONE METALLIC PIPE, CONDUIT OR TUBING TO BE INSTALLED WITHIN THE FIRESTOP SYSTEM. PIPE, CONDUIT OR TUBING TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR ASSEMBLY. THE ANNULAR SPACE WITHIN THE FIRESTOP SYSTEM SHALL BE MIN 0 IN. (POINT CONTACT) TO MAX 1 IN. (25 MM). THE FOLLOWING TYPES AND SIZES OF METALLIC PIPES OR CONDUITS MAY BE USED:

A. **STEEL PIPE --** NOM 4 IN. (102 MM) DIAM (OR SMALLER) SCHEDULE 10 OR HEAVIER) STEEL PIPE.

B. **IRON PIPE --** NOM 4 IN. (102 MM) DIAM (OR SMALLER) CAST OR DUCTILE IRON PIPE.

C. **CONDUIT --** NOM 4 IN. (102 MM) DIAM (OR SMALLER) STEEL ELECTRICAL METALLIC TUBING OR STEEL CONDUIT.

D. **COPPER TUBING --** NOM (102 MM) 4 IN. DIAM (OR SMALLER) TYPE L (OR HEAVIER) COPPER TUBING.

E. **COPPER PIPE --** NOM (102 MM) 4 IN. DIAM (OR SMALLER) REGULAR (OR HEAVIER) COPPER PIPE.

4.**FILL, VOID OR CAVITY MATERIAL* -- SEALANT --** MIN 3/4 IN. (19 MM) THICKNESS OF FILL MATERIAL APPLIED WITHIN THE ANNULUS, FLUSH WITH THE TOP SURFACE OF THE FLOOR OR THE SOLE PLATE. MIN 5/8 IN. (16 MM) THICKNESS OF FILL MATERIAL APPLIED WITHIN THE ANNULUS, FLUSH WITH BOTTOM SURFACE OF CEILING OR LOWER TOP PLATE.

**HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC** -- CP601S, CFS-S SIL GG, CP606, FS-ONE SEALANT OR FS-ONE MAX INTUMESCENT SEALANT (NOTE: L RATINGS APPLY ONLY WHEN FS-ONE SEALANT IS USED.)

*** INDICATES SUCH PRODUCTS SHALL BEAR THE UL OR CUL CERTIFICATION MARK FOR JURISDICTIONS EMPLOYING THE UL OR CUL CERTIFICATION (SUCH AS CANADA), RESPECTIVELY.**

LAST UPDATED ON 2018-03-08

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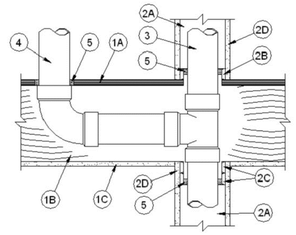
FLOOR PENETRATION
U.L. SYSTEM NO. F-C-1009

**System No. F-C-2027**
December 09, 2008
F Rating -- 1 Hr
T Rating -- 0 Hr




1.**Floor Assembly --** The 1 hr fire rated wood truss or combination wood and steel truss Floor-Ceiling assembly shall be constructed of the materials and in the manner described in the individual L500 Series Design in the UL Fire Resistance Directory, as summarized below:

A. **Flooring System --** Lumber or plywood subfloor with finish floor of lumber, plywood or **Floor Topping Mixture*** as specified in the individual Floor-Ceiling Design. Diam of opening shall be 1/2 in. to 1 in. (13 to 25 mm) larger than the outside diam of nonmetallic pipe (Items 3 and 4).

B. **Joists --** Nom 10 in. (254 mm) deep (or deeper) lumber, steel or combination lumber and steel joists, trusses or **Structural Wood Members*** with bridging as required and with ends firestopped.

C. **Gypsum Board* --** Nom 4 ft (1.2 m) wide by 5/8 in. (16 mm) thick, attached as described in the individual Floor-Ceiling Design.

2.**Chase Wall --** The through penetrant (Item 3) shall be routed through a 1 hr fire rated single, double or staggered wood studs/gypsum board chase wall constructed of the materials and in the manner specified in the individual U300 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:

A. **Studs --** Nom 2 by 4 in. (51 by 102 mm) or 2 by 6 in. (51 by 152 mm) lumber studs.

B. **Sole Plate --** Nom 2 by 4 in. (51 by 102 mm) or 2 by 6 in. (51 by 152 mm) lumber plates. Diam of opening or length of notch-out in sole plate to be 1/2 in. to 1 in. (13 to 25 mm) larger than outside diam of pipe.

C. **Top Plate --** The double top plate shall consist of two nom 2 by 4 in. (51 by 102 mm) or 2 by 6 in. (51 by 152 mm) lumber plates. Diam of opening or length of notch-out in top plate to be 1/2 in. to 1 in. (13 to 25 mm) larger than outside diam of pipe.

D. **Gypsum Board* --** Thickness, type, number of layers and fasteners shall be as specified in individual Wall and Partition Design.

3.**Through Penetrant --** One nonmetallic pipe to be installed within the firestop system. Pipe to be rigidly supported on both sides of floor-ceiling assembly. The annular space between pipe and periphery of opening shall be min 0 in. (point contact) to max 1/2 in. (0 to max 13 mm). The following types and sizes of nonmetallic pipes may be used:

A. **Polyvinyl Chloride (PVC) Pipe --** Nom 3 in. (76 mm) diam (or smaller) Schedule 40 solid core or cellular core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping system.

B. **Acrylonitrile Butadiene Styrene (ABS) Pipe --** Nom 3 in. (76 mm) diam (or smaller) Schedule 40 solid core or cellular core ABS pipe for use in closed (process or supply) or vented (drain, waste or vent) piping system.

4.**Branch Piping --** (Optional) - One nonmetallic pipe to be connected to through penetrant (Item 3) and installed within opening in subfloor. The annular space between pipe and periphery of opening shall be min 0 in. (point contact) to max 1/2 in. (13 mm). The following types and sizes of nonmetallic pipes may be used:

A. **Polyvinyl Chloride (PVC) Pipe --** Nom 3 in. (76 mm) diam (or smaller) Schedule 40 solid core or cellular core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping system.

B. **Acrylonitrile Butadiene Styrene (ABS) Pipe --** Nom 3 in. (76 mm) diam (or smaller) Schedule 40 solid core or cellular core ABS pipe for use in closed (process or supply) or vented (drain, waste or vent) piping system.

5.**Fill, Void or Cavity Materials* -- Caulk or Sealant --** Min 3/4 in. (19 mm) thickness of fill material applied within annular space around perimeter of through penetrant (Item 3), flush with top surface of floor or sole plate and flush with bottom surface of top plate. Min 3/4 in. (19 mm) thickness of fill material applied within annular space around perimeter of branch piping (Item 4) flush with top surface of floor. Min 1/2 in. (13 mm) diam bead applied at the pipe/floor interface and the pipe/plate interface.

**SPECIFIED TECHNOLOGIES INC** -- SpecSeal Series SSS Sealant, SpecSeal LCI Sealant or Type WF300 Firestop Caulk

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

Last Updated on 2008-12-08

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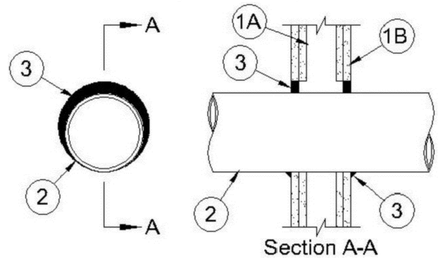
FLOOR PENETRATION
U.L. SYSTEM NO. F-C-2027

**System No. W-L-1296**
February 14, 2008
**F Ratings -- 1 and 2 Hr (See Item 1)**
**T Ratings -- 0 and 1/4 Hr (See Item 1)**




1.**Wall Assembly --** The 1 or 2 hr fire rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner described in the individual U300, U400 or V400 Series Wall and Partition Design in the UL Fire Resistance Directory and shall include the following construction features:

A. **Studs --** Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. (51 by 102 mm) lumber spaced 16 in. (406 mm) OC. Steel studs to be min 3-1/2 in. (89 mm) wide spaced max 24 in. (610 mm) OC.

B. **Gypsum Board* --** The gypsum board type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual U300, U400 or V400 Series Design in the UL Fire Resistance Directory. Max diam of opening is 10-5/8 in. (270 mm).

C. **Steel Sleeve --** (Optional, Not Shown) - Cylindrical sleeve fabricated from min 0.019 in. thick (0.48 mm) galv sheet steel and having a min 2 in. (51 mm) lap along the longitudinal seam. Length of steel sleeve to be equal to thickness of wall. Sleeve installed by coiling the sheet steel to a diam smaller than the through opening, inserting the coil through the openings and releasing the coil to let it uncoil against the circular cutouts in the gypsum wallboard layers.

**The hourly F Rating of the firestop system is equal to the hourly fire rating of the wall assembly in which it is installed. The hourly T Rating is 0 and 1/4 Hr for 1 and 2 Hr rated assemblies, respectively.**

2.**Through-Penetrants --** One metallic pipe, conduit, tubing or flexible metal pipe installed concentrically or eccentrically within opening. Annular space between penetrant and periphery of opening to be min 0 in. (0 mm point contact) to max 2 in. (51 mm). Penetrant to be rigidly supported on both sides of wall. The following types and sizes of penetrants may be used:

A. **Steel Pipe --** Nom 8 in. (203 mm) diam (or smaller) Schedule 5 (or heavier) steel pipe.

B. **Iron Pipe --** Nom 8 in. (203 mm) diam (or smaller) cast or ductile iron pipe.

C. **Conduit --** Nom 4 in. (102 mm) diam (or smaller) steel electrical metallic tubing (EMT) or nom 6 in. (152 mm) rigid steel conduit.

D. **Copper Tubing --** Nom 4 in. (102 mm) diam (or smaller) Type L (or heavier) copper tubing.

E. **Copper Pipe --** Nom 4 in. (102 mm) diam (or smaller) Regular (or heavier) copper pipe.

F. **Through Penetrating Product*-Flexible Metal Piping --** The following types of steel flexible metal gas piping may be used:

1.) Nom 2 in. (51 mm) diam (or smaller) steel flexible metal gas piping. Plastic covering on piping may or may not be removed on both sides of floor or wall assembly.

**OMEGA FLEX INC**

2.) Nom 1 in. (25 mm) diam (or smaller) steel flexible metal gas piping. Plastic covering on piping may or may not be removed on both sides of floor or wall assembly.

**GASTITE, DIV OF TITEFLEX**

3.) Nom 1 in. (25 mm) diam (or smaller) steel flexible metal gas piping. Plastic covering on piping may or may not be removed on both sides of floor or wall assembly.

**WARD MFG L L C**

3.**Fill, Void or Cavity Material* - Caulk or Sealant --** Min 5/8 in. (16 mm) thickness of caulk applied within annulus, flush with both surfaces of wall. Min 1/4 in. (6 mm) diam bead of caulk applied to gypsum board/penetrant interface at point contact location on both sides of wall.

**3M COMPANY** -- IC 15WB+, CP 25WB+ caulk or FB-3000 WT sealant

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Last Updated on 2008-02-14

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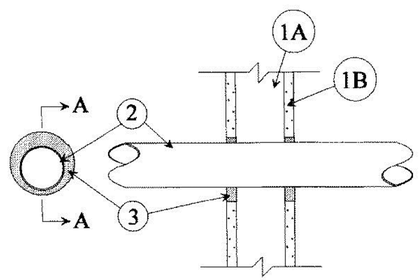
WALL PENETRATION
U.L. SYSTEM NO. W-L-1296

**System No. W-L-2126**
December 07, 2002
**F Ratings -- 1, 2, 3 and 4 Hr (See Item 1)**
**T Ratings -- 1, 2, 3 and 4 Hr (See Item 1)**




1.**Wall Assembly --** The 1, 2, 3 or 4 hr fire-rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U300 or U400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:

A. **Studs --** Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. lumber spaced 16 in. OC. Steel studs to be min 3-5/8 in. wide and spaced max 24 in. OC.

B. **Gypsum Board* --** The gypsum board type, thickness, number of layers, fasteners type and sheet orientation shall be as specified in the individual U300 or U400 Series Design. In the UL Fire Resistance Directory, Max diam of opening is 3-1/8 in.

**The hourly F and T Ratings of the firestop system is equal to the hourly fire rating of the assembly in which it is installed.**

2.**Through Penetrants --** One nonmetallic pipe or tubing installed either concentrically or eccentrically within the firestop system. Pipe or tubing to be rigidly supported on both sides of wall assembly. The following types and sizes of nonmetallic pipes or tubing may be used:

A. **Chlorinated Polyvinyl Chloride (CPVC) Pipe --** Nom 2 in. diam (or smaller) SDR 11 CPVC pipe for use in closed (process or supply) piping systems. The annular space between pipe and periphery of opening shall be min 1/4 in. to max 1/2 in.

B. **Crosslinked Polyethylene (PEX) Tubing --** Nom 1-1/2 in. diam (or smaller) SDR 9 PEX tubing for used in closed (process or supply) piping systems. The annular space between tubing and periphery of opening shall be min 1/4 in. to max 3/8 in.

C. **Polyvinyl Chloride (PVC) Pipe --** Nom 2 in. diam (or smaller) Schedule 40 solid or cellular core PVC pipe for use in closed (process or supply) piping systems.

3.**Fill, Void or Cavity Material* -- Sealant --** Min 5/8 in. thickness of fill material for a 1 hr rated wall assembly, min 1 in. thickness of fill material for 2, 3 and 4 hr rated wall assemblies applied within the annulus, flush with both surfaces of wall.

**PASSIVE FIRE PROTECTION PARTNERS** -- 3600EX, 4800DW

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Last Updated on 2002-12-07

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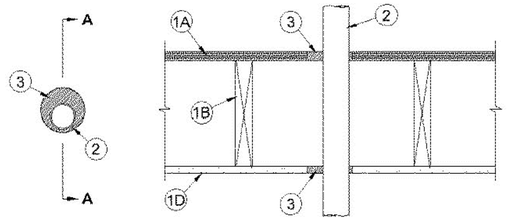
WALL PENETRATION
U.L. SYSTEM NO. W-L-2126

**System No. F-C-2309**
August 26, 2004
**F Rating -- 1 Hr**
**T Ratings -- 1/4 and 1 Hr (See Item 2)**




1.**Floor-Ceiling Assembly --** The 1 hr fire-rated wood joist, wood truss or combination wood and steel truss Floor-Ceiling assembly shall be constructed of the materials and in the manner described in the individual L500 Series Design in the UL Fire Resistance Directory and shall include the following construction features:

A. **Flooring System --** Lumber or plywood subfloor with finish floor of lumber, plywood or **Floor Topping Mixture*** as specified in the individual Floor-Ceiling Design. Max diam of floor opening is 3-3/8 in. (92 mm).

B. **Joists --** Nom 2 by 10 in. (51 by 254 mm) deep (or deeper) lumber joists spaced 16 in. (406 mm) OC with nom 1 by 3 in. (25 by 76 mm) lumber bridging and with ends firestopped or steel or combination lumber and steel joists, trusses or **Structural Wood Members*** with bridging as required and with ends firestopped.

C. **Furring Channels --** (Not Shown) - Resilient galv steel furring channels installed perpendicular to wood joists (Item 1B) as required in the individual Floor-Ceiling Design.

D. **Gypsum Board* --** Nom 5/8 in. (16 mm) thick as specified in the individual Floor-Ceiling Design. Max diam of opening is 3-3/8 in. (92 mm).

1.1 **Chase Wall --** (Optional, Not Shown) - The through penetrant (Item 2) may be routed through a 1 hr fire-rated single, double or staggered wood stud/gypsum wallboard chase wall constructed of the materials and in the manner specified in the individual U300 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:

A. **Studs --** Nom 2 by 6 in. (51 by 152 mm), or double nom 2 by 4 in. (51 by 102 mm) lumber studs.

B. **Sole Plate --** Nom 2 by 6 in. (51 by 152 mm), or parallel 2 by 4 in. (51 by 102 mm) lumber plates, tightly butted. Max diam of opening is 3-3/8 in. (92 mm).

C. **Top Plate --** The double top plate shall consist of two nom 2 by 6 in. (51 by 152 mm) or two sets of parallel 2 by 4 in. (51 by 102 mm) lumber plates, tightly butted. Max diam of opening is 3-3/8 in. (92 mm).

D. **Gypsum Board* --** Thickness, type, number of layers and fasteners shall be as specified in the individual Wall and Partition Design.

2.**Through Penetrant --** One nonmetallic pipe to be installed eccentrically or concentrically within the firestop system. The annular space between the nonmetallic pipe and edge of through opening shall be min 1/4 in. to max 3/4 in. (6 to 19 mm). Pipe, conduit or tubing to be rigidly supported on both sides of the floor-ceiling assembly. The following types and sizes of metallic pipes, conduits and tubes may be used:

A. **Chlorinated Polyvinyl Chloride (CPVC) Pipe --** Nom 2 in. (51 mm) diam (or smaller) SDR13.5 CPVC pipe for use in closed (process or supply) piping systems.

B. **Polyvinyl Chloride (PVC) Pipe --** Nom 2 in. (51 mm) diam (or smaller) Schedule 40 solid-core PVC pipe for use in closed (process or supply) or vented (drain, waste, or vent) piping systems.

C. **Rigid Nonmetallic Conduit+ --** Nom 2 in. (51 mm) diam (or smaller) Schedule 40 PVC conduit installed in accordance with Article 347 of the National Electrical Code (NFPA 70).

D. **Cross-Linked Polyethylene (PEX) Tubing --** Nom 1 in. (25 mm) diam (or smaller) SDR9 PEX tubing for used in closed (process or supply) piping systems.

E. **Polybutylene (PB) Pipe --** Nom 1 in. (25 mm) diam (or smaller) SDR11 PB pipe for use in closed (process or supply) piping systems.

F. **Cross-Linked Polyethylene Aluminum Cross-Linked Polyethylene (PEX-AL-PEX) Tubing --** Nom 1 in. (25 mm) diam (or smaller) SDR 5 PEX-AL-PEX tubing for use in closed (process or supply) piping systems.

**When Items A, B, C, D and E are used, the chase wall is optional. When Item F is used, the chase wall is required. When nom diam of pipe exceeds 1 in. and chase wall is not used, the hourly T Rating is 1/4 hr. Otherwise, the T Rating is 1 hr.**

3.**Fill, Void or Cavity Material* - Caulk --** Min 3/4 in. (19 mm) thickness of fill material applied within annulus on top surface of floor. Min 5/8 in. (16 mm) thickness of fill material applied within annulus on bottom surface of ceiling or lower top plate of chase wall assembly.

**HCC HOLDINGS INC** -- Hercules Plumbers Firestop Sealant

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Last Updated on 2004-08-26

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FLOOR PENETRATION
U.L. SYSTEM NO. F-C-2309


KONTOGIANNIS & ASSOCIATES
ARCHITECTURE
PLANNING
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43215-5492

PHONE: 614-224-2083
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PROJECT:

TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

PLUMBING FIRE STOP SYSTEMS

DATE: 06/26/2026
REVISED:

GEORGE J. KONTOGIANNIS REGISTERED No. AR00034309 STATE OF INDIANA ARCHITECT

GEORGE J. KONTOGIANNIS, LICENSE #AR00034309
EXPIRATION DATE 12/31/2027


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- [ ] SUBMISSION SET 06/27/2025
- [ ] ZONING SET 05/07/2026
- [x] BID SET 06/26/2026
- [ ] PERMIT SET
- [ ] CONSTRUCTION SET

P3-2

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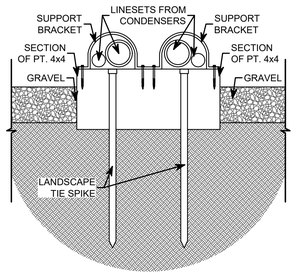
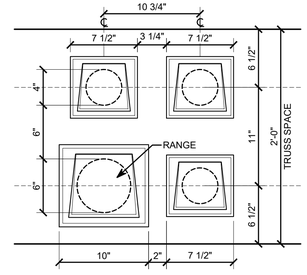


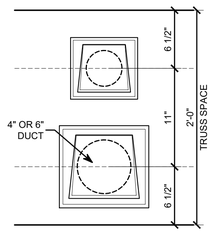

## BLOCK DETAIL 1

SCALE: 3" = 1'-0"



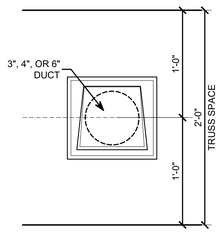

## LOUVER DETAIL A

SCALE: 1 1/2" = 1'-0"



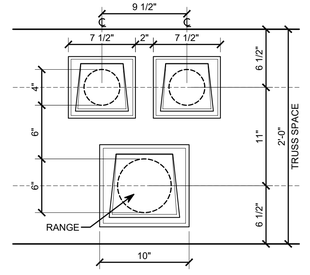

## LOUVER DETAIL B

SCALE: 1 1/2" = 1'-0"




## LOUVER DETAIL C

SCALE: 1 1/2" = 1'-0"




## LOUVER DETAIL D

SCALE: 1 1/2" = 1'-0"

## INTAKE & EXHAUST LOUVERS

**EXHAUST LOUVERS** WALL LOUVERS SHALL BE PRE-FINISHED VINYL WALL HOODS BY MID-AMERICA CO. UNITS SHALL BE COLOR TO MATCH SIDING OR STONE.

LOUVER #1 (BE) BATH EXHAUST - 4" ROUND HOODED VENT WITH BACK-DRAFT DAMPER & SCREEN.

LOUVER #2 (DE) DRYER EXHAUST - 4" ROUND HOODED VENT WITH BACK-DRAFT DAMPER & NO SCREEN.

LOUVER #3 (RH) RANGE EXHAUST - 6" ROUND HOODED VENT WITH BACK-DRAFT DAMPER & SCREEN.

LOUVER #4 (FA) MAKE-UP AIR INTAKE - 4" ROUND HOODED VENT WITH BACK-DRAFT DAMPER & SCREEN. PROVIDE 4" Ø BACKDRAFT SPRING LOADED IN DUCT DAMPER @ CEILING GRILLE.

## SOFFIT VENTS

**SOFFIT VENTS** SOFFIT VENTS SHALL BE PRE-FINISHED (WHITE) AS MANUFACTURED BY PRIMEX OR EQUAL

VENT #5 (BE) BATH EXHAUST - RDV - 4" ROUND W/ SCREEN. USE EB4x90 ELBOW

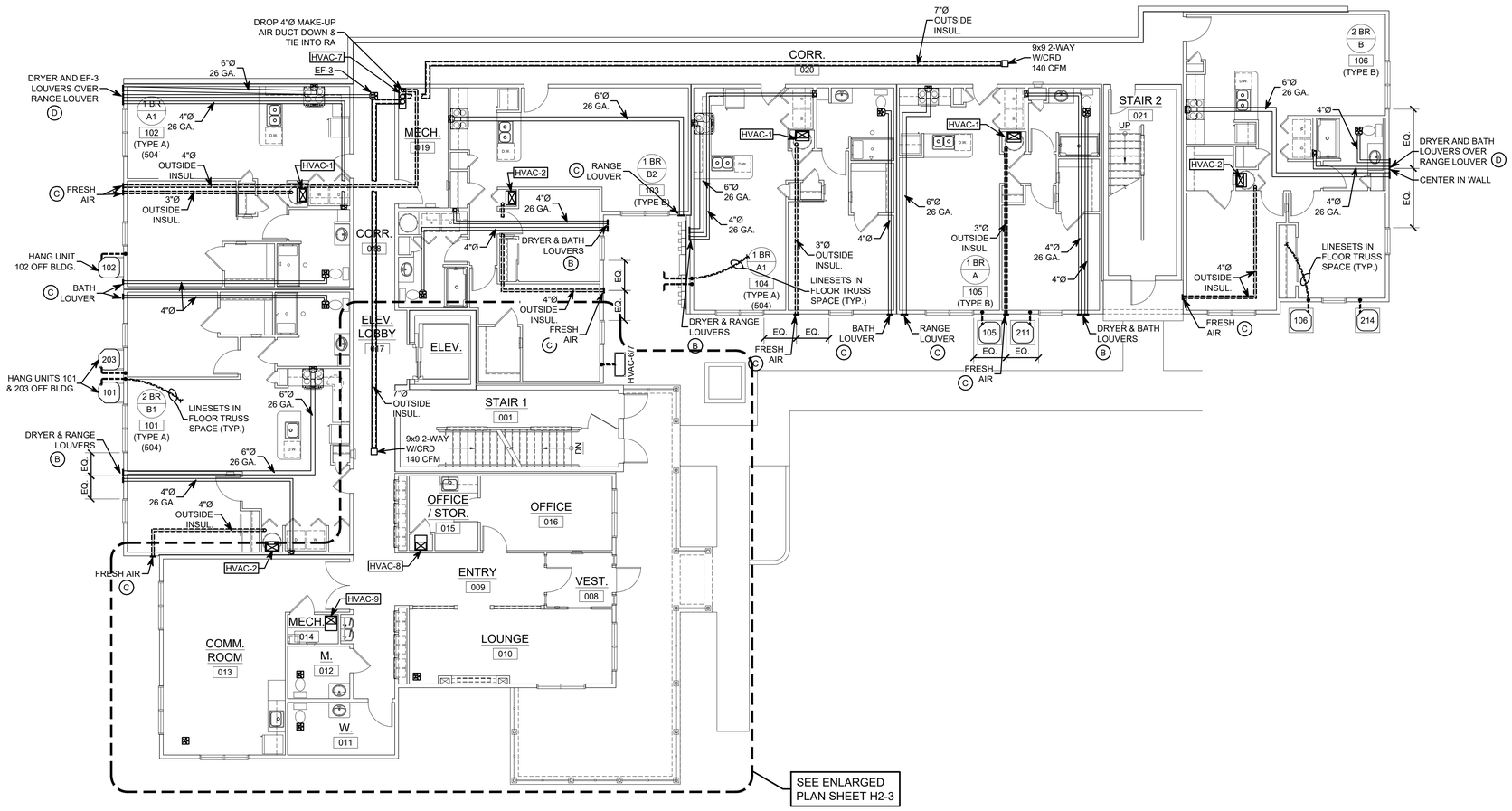
VENT #6 (DE) DRYER EXHAUST - SV4-01 LOW PROFILE SOFFIT VENT W/ BACK DRAFT DAMPER - NO SCREEN.

VENT #7 (RH) RANGE EXHAUST - SV6-01 LOW PROFILE SOFFIT VENT W/ BACK DRAFT DAMPER & SCREEN

VENT #8 (FA) SAME AS VENT #5. INSTALL 4" Ø BACK DRAFT SPRING LOADED IN DUCT DAMPER @ CEILING GRILLE.

GENERAL NOTES:

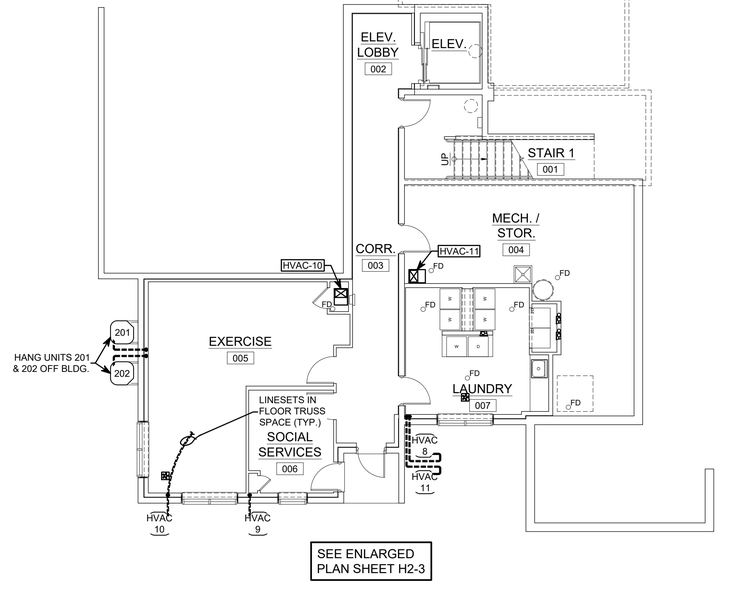
1. ADJUST ALL REGISTERS AS NEEDED TO MISS TRUSSES.
2. ADD BLOCKING AS NEEDED TO SECURE REGISTERS.
3. PLACE SUPPLY AIR PLENUMS IN TRUSS SPACE ADJUST AS NEEDED TO MISS TRUSSES.
4. PROVIDE PRE-FINISHED CAP TO MATCH WITH BACKDRAFT DAMPER FOR ALL EXHAUST LOUVERS.
5. LINESETS THROUGH FLOOR TRUSS SPACES AND DOWN WALLS.
6. UNDER-CUT DOOR 1" FOR RETURN AIR (TYPICAL).
7. MAINTAIN 3'-0" FROM OPERABLE OPENINGS INTO BUILDINGS FOR ALL EXHAUST LOUVERS.
8. ALL THIRD FLOOR EXHAUST & FRESH AIR LOUVERS SHALL BE INSTALLED IN THE SOFFIT.
9. ALL WALL FIRE DAMPERS AND CEILING RADIANT FIRE DAMPERS SHALL BE ONE & ONE HALF (1 1/2) HOUR RATED




## FIRST FLOOR HVAC PLAN

SCALE: 1/8" = 1'-0"

NOTE: LOUVERS SHALL BE SET TO ALIGN HORIZONTALLY & IN GENERAL CENTERED IN THE WALL SPACE BETWEEN WINDOWS




## GROUND FLOOR HVAC PLAN

SCALE: 1/8" = 1'-0"

KONTOGIANNIS & ASSOCIATES
ARCHITECTURE
PLANNING
DESIGN

400 SOUTH FIFTH ST
SUITE 400
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43215-5492

PHONE: 614-224-2083
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E-MAIL: architects@kontogiannis.com

PROJECT:
TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:
GROUND & FLOOR BUILDING HVAC PLANS

GEORGE J. KONTOGIANNIS REGISTERED No. AR00034309 STATE OF INDIANA ARCHITECT

DATE: 06/26/2026
REVISED:

GEORGE J. KONTOGIANNIS, LICENSE #AR00034309
EXPIRATION DATE 12/31/2027

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H1-1

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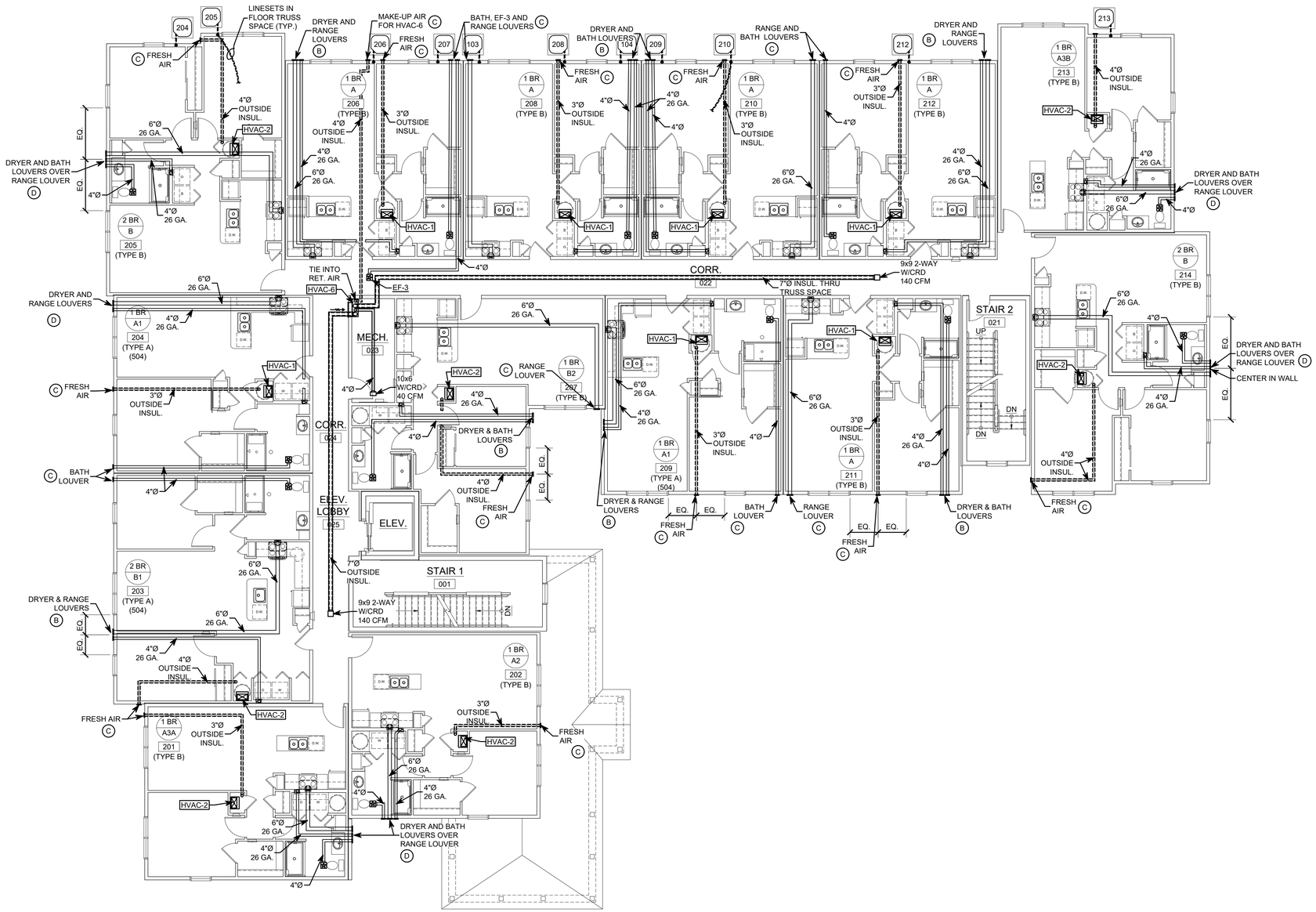


## SECOND FLOOR HVAC PLAN

SCALE: 1/8" = 1'-0"


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ARCHITECTURE
PLANNING
DESIGN

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PROJECT:

# TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

SECOND FLOOR BUILDING HVAC PLAN

DATE: 06/26/2026
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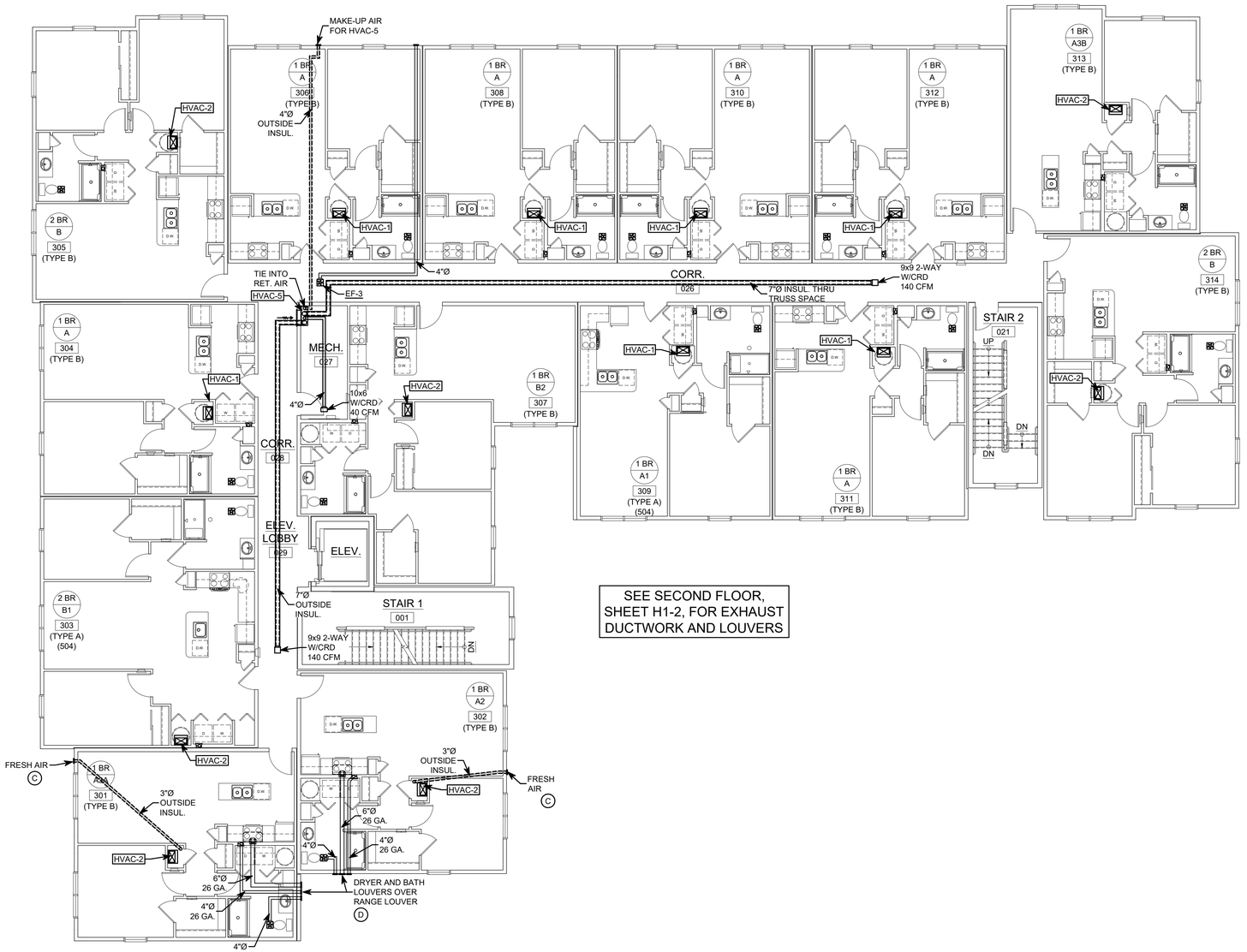


SEE SECOND FLOOR, SHEET H1-2, FOR EXHAUST DUCTWORK AND LOUVERS

## THIRD FLOOR HVAC PLAN

SCALE: 1/8" = 1'-0"


**KONTOGIANNIS & ASSOCIATES**

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PROJECT:

# TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

THIRD FLOOR BUILDING HVAC PLAN

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H1-3


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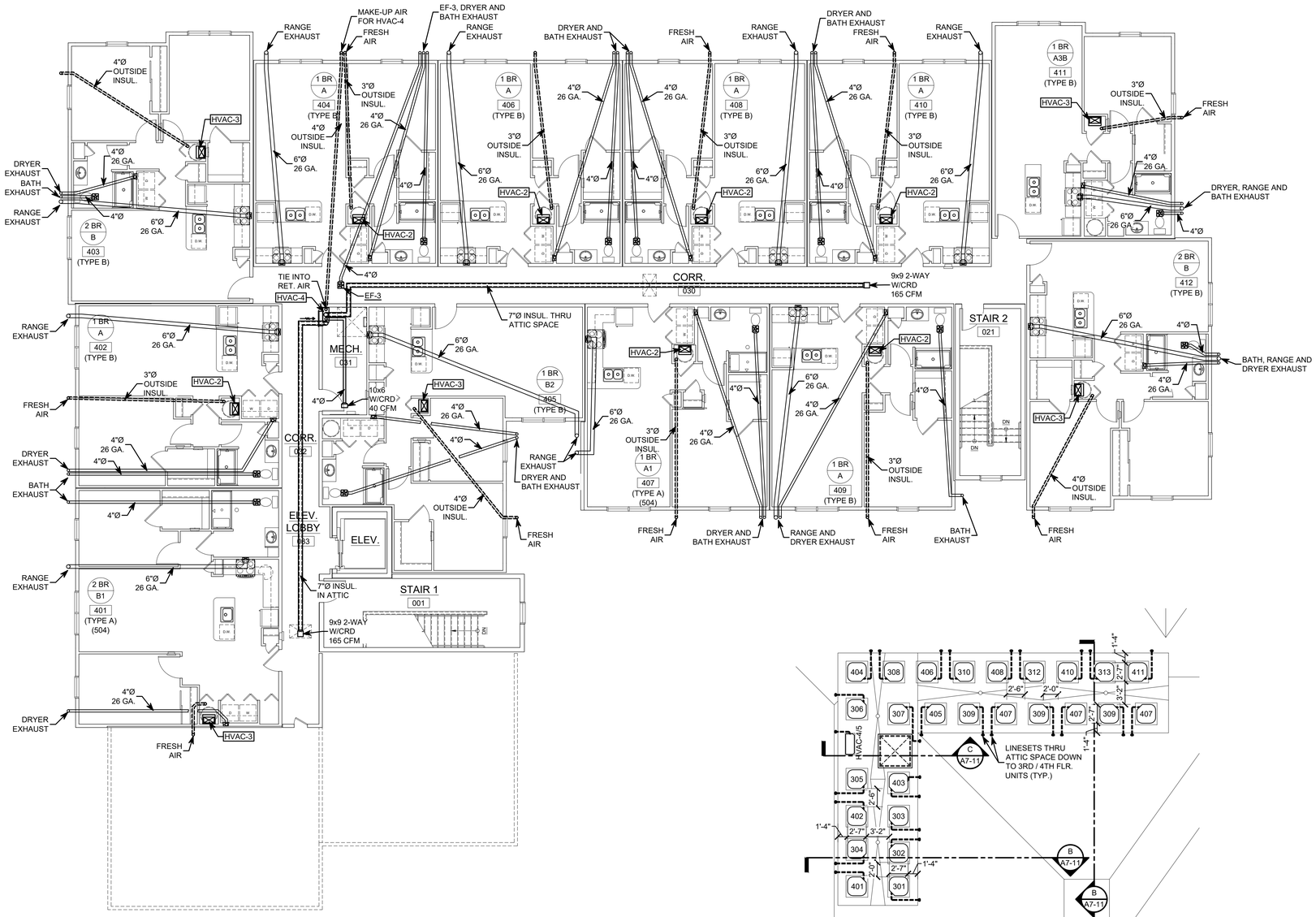


## FOURTH FLOOR HVAC PLAN

SCALE: 1/8" = 1'-0"




## HVAC ROOF PLAN

SCALE: 1/8" = 1'-0"


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PLANNING
DESIGN

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PROJECT:

# TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

FOURTH FLOOR BUILDING HVAC PLAN

DATE: 06/26/2026
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H1-4


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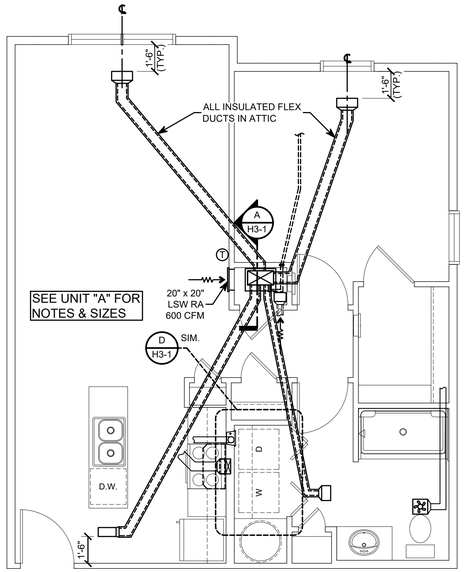
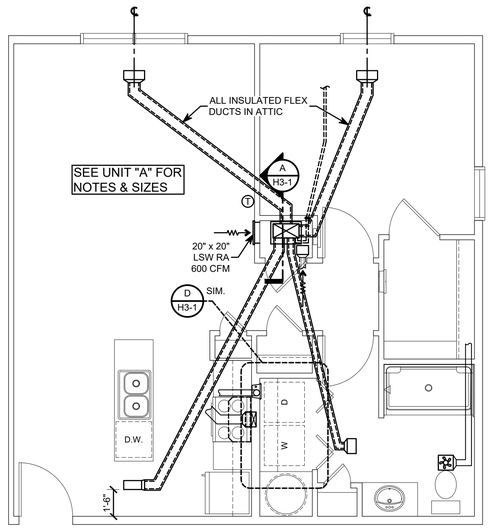


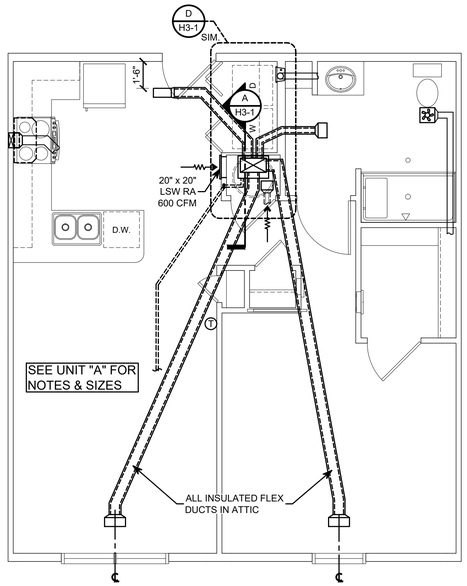

## 4TH FL. ONE BEDROOM (TYPE B) UNIT A3B

SCALE: 1/4" = 1'-0" UNIT A3A SIM.



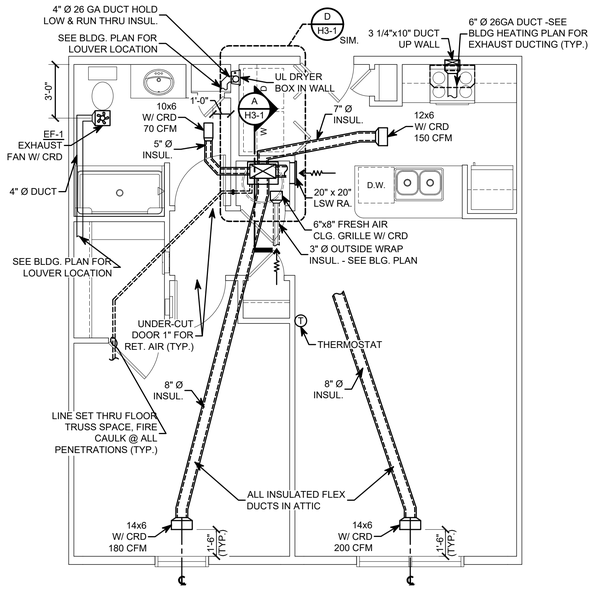

## 3RD FL. ONE BEDROOM (TYPE B) UNIT A2

SCALE: 1/4" = 1'-0"



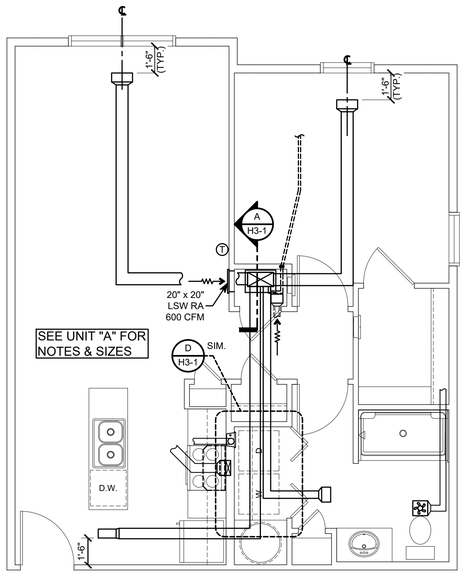

## 4TH FL. ONE BEDROOM (TYPE A) (504) UNIT A1

SCALE: 1/4" = 1'-0"



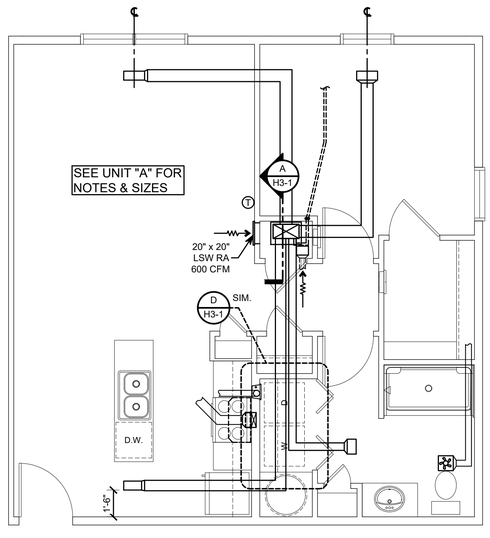

## 4TH FL. ONE BEDROOM (TYPE B) UNIT A

SCALE: 1/4" = 1'-0"



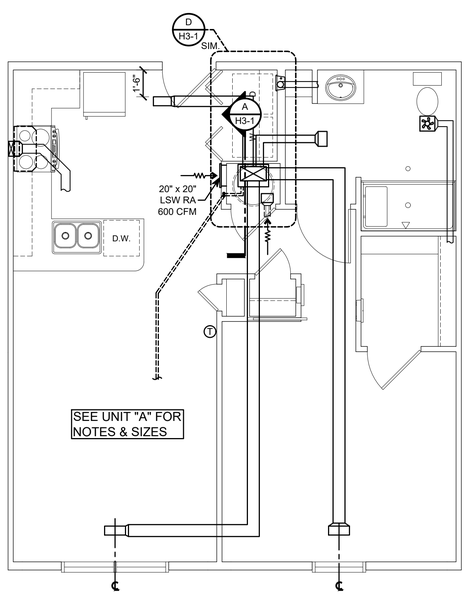

## 1ST, 2ND & 3RD FL. ONE BEDROOM (TYPE B) UNIT A3B

SCALE: 1/4" = 1'-0" UNIT A3A SIM.



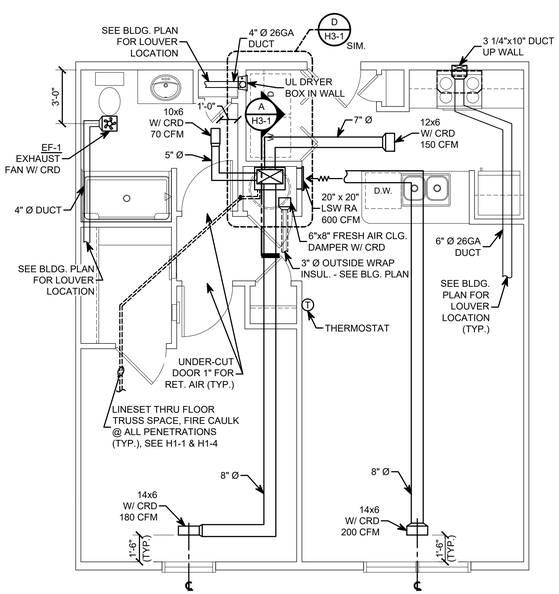

## 2ND FL. ONE BEDROOM (TYPE B) UNIT A2

SCALE: 1/4" = 1'-0"




## 1ST, 2ND & 3RD FL. ONE BEDROOM (TYPE A) (504) UNIT A1

SCALE: 1/4" = 1'-0"




## 1ST, 2ND & 3RD FL. ONE BEDROOM (TYPE B) UNIT A

SCALE: 1/4" = 1'-0"

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PROJECT:

# TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

1/4" UNIT HVAC PLANS

DATE: 06/26/2026
REVISED:

GEORGE J. KONTOGIANNIS REGISTERED No. AR00034309 STATE OF INDIANA ARCHITECT

GEORGE J. KONTOGIANNIS, LICENSE #AR00034309
EXPIRATION DATE 12/31/2027


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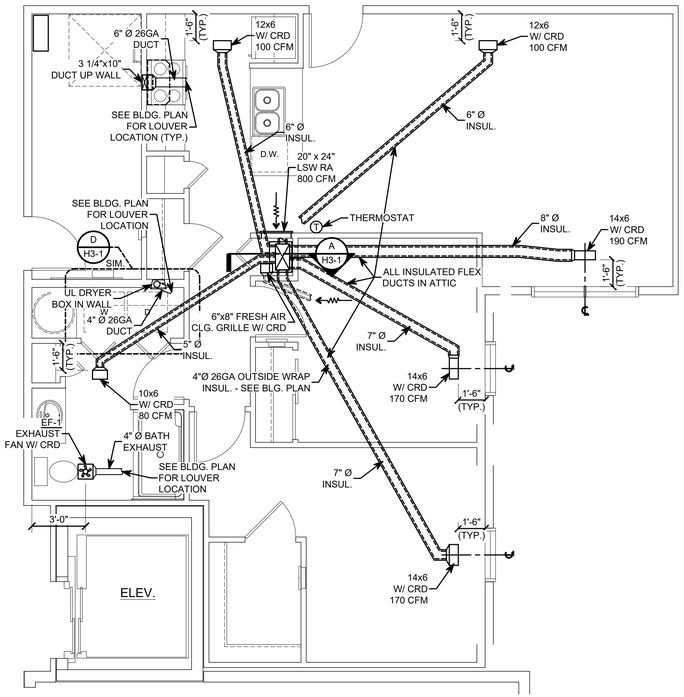
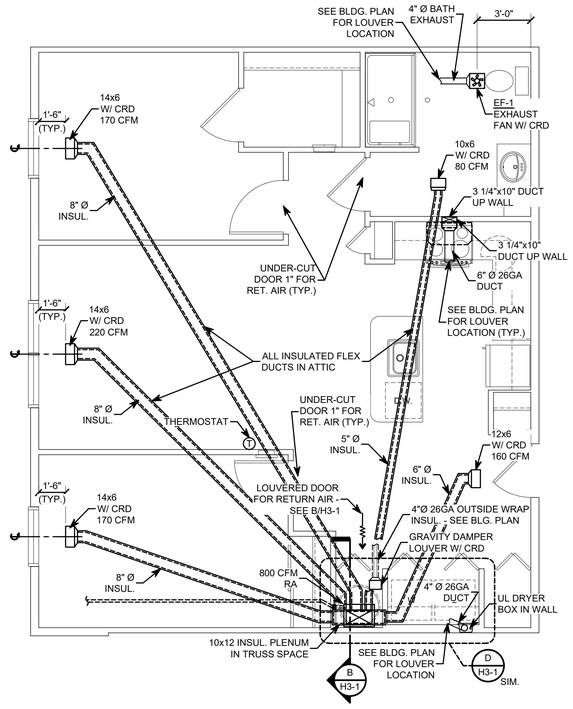
- ☐ CONSTRUCTION SET

H2-1



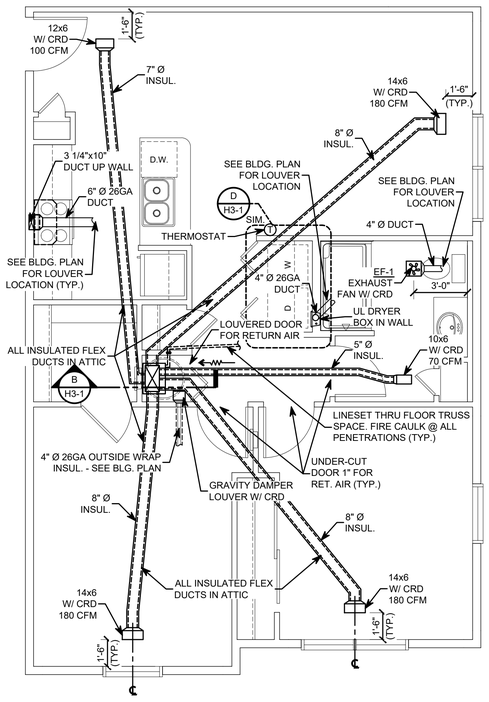

## 4TH FL. TWO BEDROOM (TYPE B) UNIT B2

SCALE: 1/4" = 1'-0"



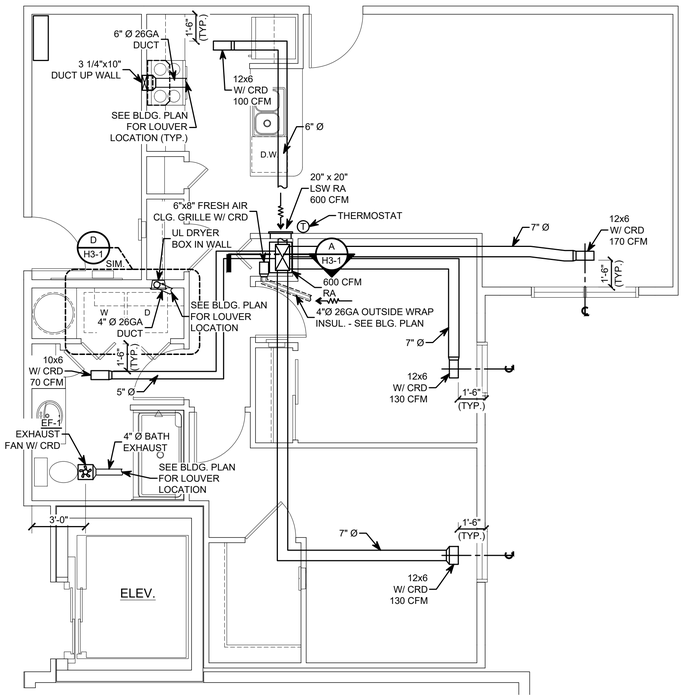

## 4TH FL. TWO BEDROOM (TYPE A) (504) UNIT B1

SCALE: 1/4" = 1'-0"



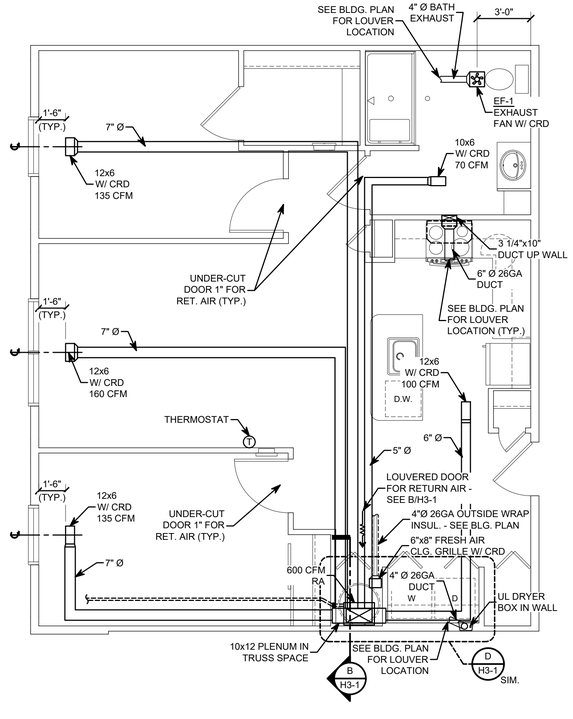

## 4TH FL. TWO BEDROOM (TYPE B) UNIT B

SCALE: 1/4" = 1'-0"



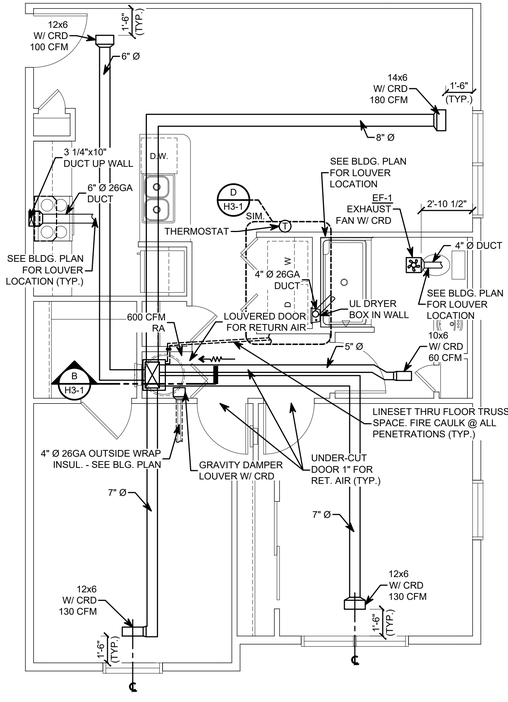

## 1ST, 2ND & 3RD FL. TWO BEDROOM (TYPE B) UNIT B2

SCALE: 1/4" = 1'-0"




## 1ST, 2ND & 3RD FL. TWO BEDROOM (TYPE A) (504) UNIT B1

SCALE: 1/4" = 1'-0"




## 1ST, 2ND & 3RD FL. TWO BEDROOM (TYPE B) UNIT B

SCALE: 1/4" = 1'-0"


KONTOGIANNIS & ASSOCIATES

ARCHITECTURE
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DESIGN

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PROJECT:

TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

1/4" UNIT HVAC PLANS

DATE: 06/26/2026
REVISED:

GEORGE J. KONTOGIANNIS REGISTERED No. AR00034309 STATE OF INDIANA ARCHITECT

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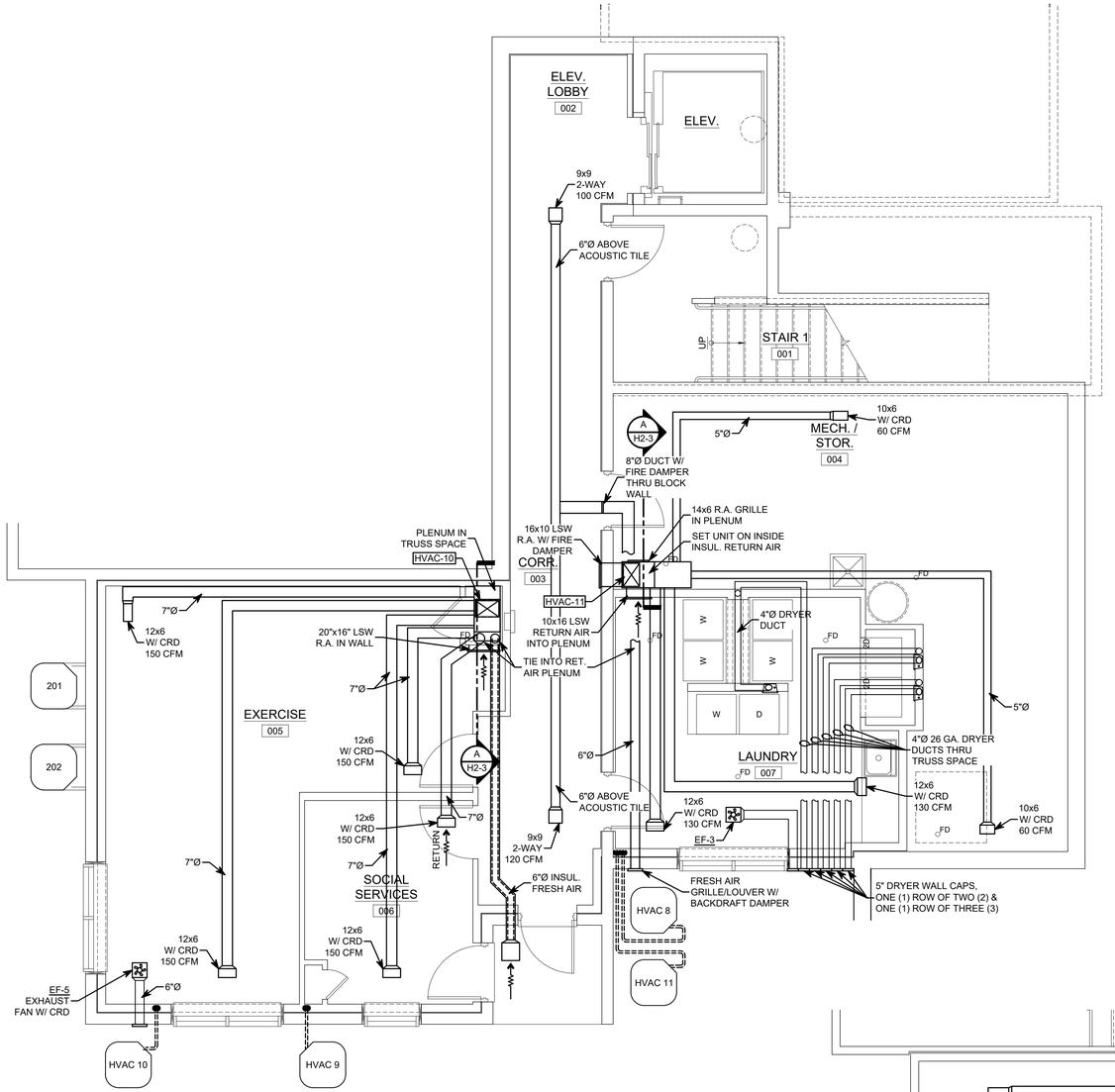
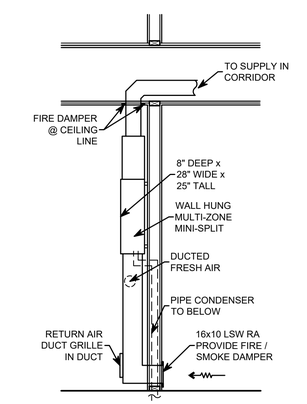


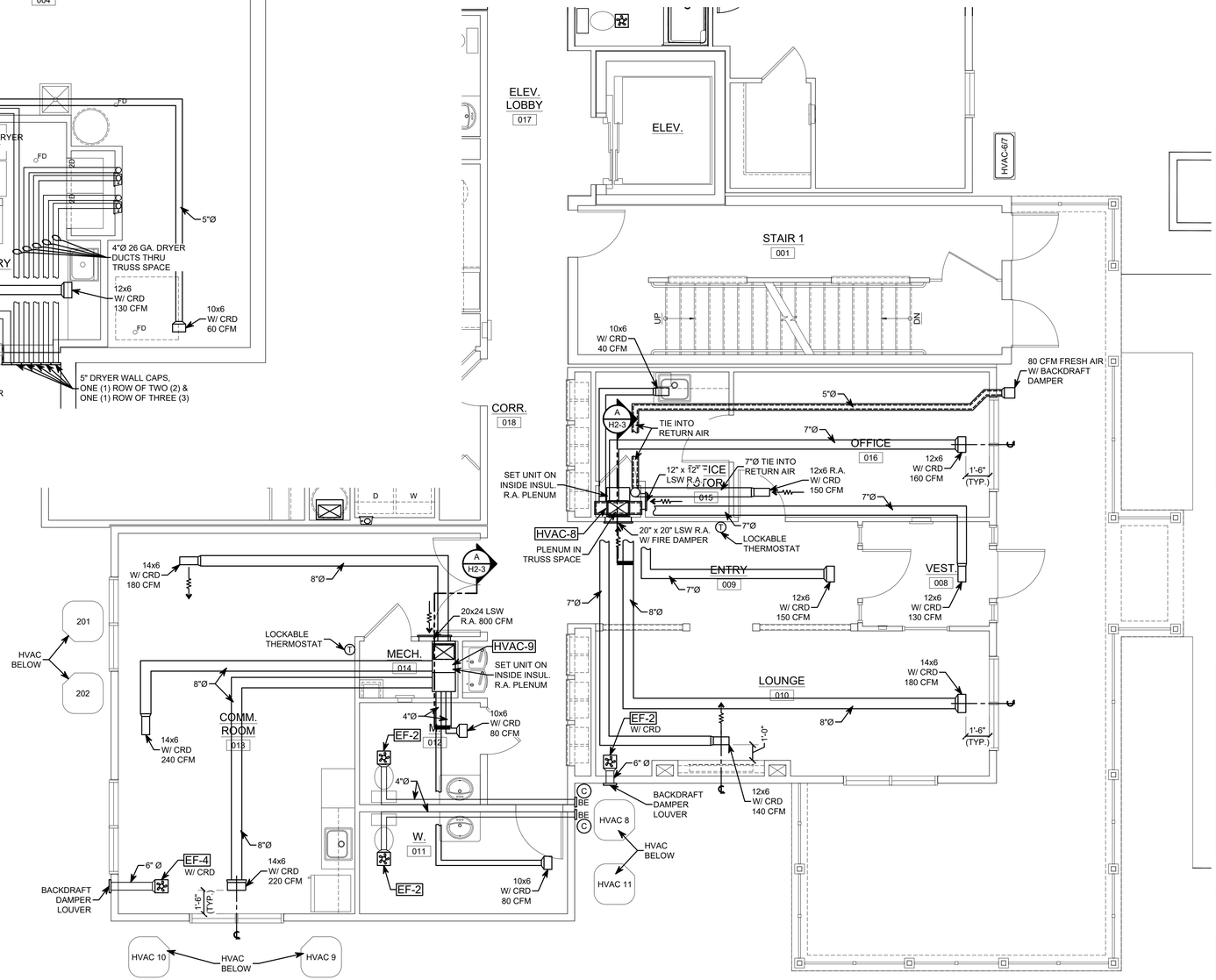

## ENLARGED GROUND FLOOR HVAC PLAN

SCALE: 1/4" = 1'-0"




## HVAC DETAIL (A)

SCALE: 1/2" = 1'-0"




## ENLARGED FIRST FLOOR HVAC PLAN

SCALE: 1/4" = 1'-0"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SUITE 400
COLUMBUS, OHIO
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E-MAIL: architects@kontogiannis.com


PROJECT:

# TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

ENLARGED GROUND & FIRST FLOOR HVAC PLANS

DATE: 06/26/2026
REVISED:

GEORGE J. KONTOGIANNIS REGISTERED No. AR00034309 STATE OF INDIANA ARCHITECT

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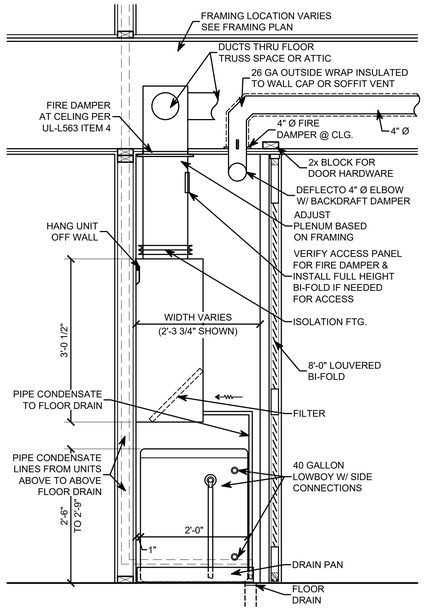
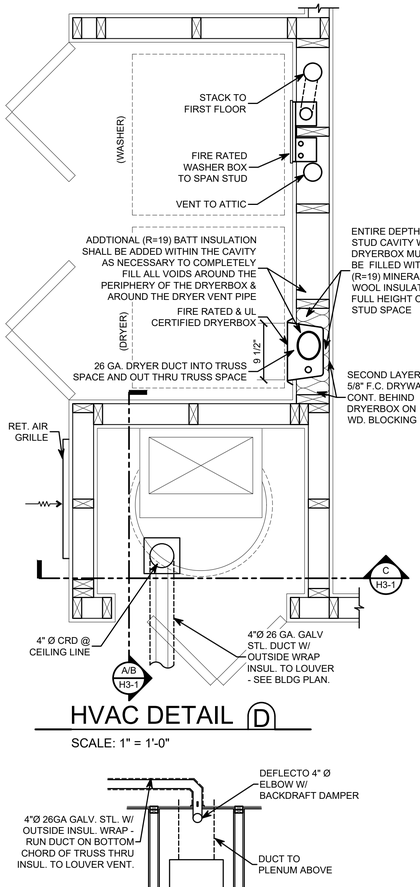


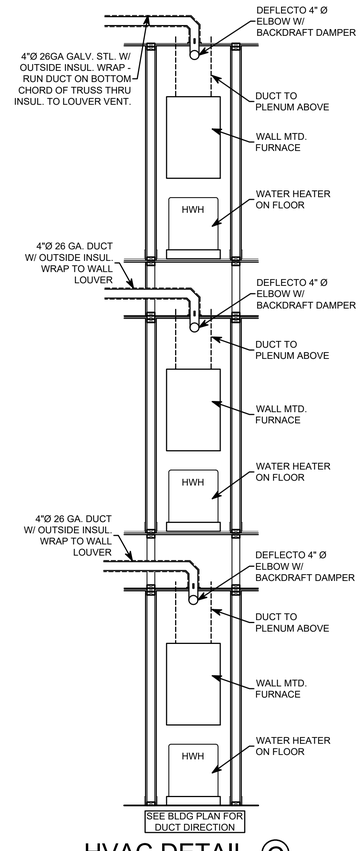

## HVAC DETAIL B

SCALE: 3/4" = 1'-0"



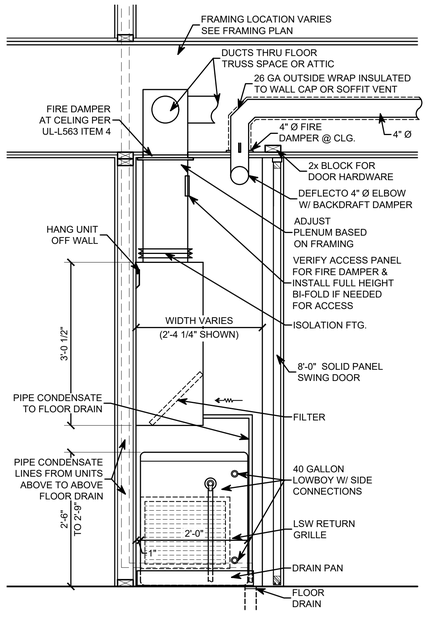

## HVAC DETAIL D

SCALE: 1" = 1'-0"




## HVAC DETAIL C

SCALE: 3/8" = 1'-0"




## HVAC DETAIL A

SCALE: 3/4" = 1'-0"

## HEATING EQUIPMENT SCHEDULE

HVAC-1 BRYANT OR APPROVED EQUAL, WALL HUNG FAN COIL WITH SUPPLEMENTARY ELECTRIC HEAT AND HEAT PUMP CONDENSER. PROVIDE AHRI CERTIFICATION SHOWING RATING. PROVIDE A PROGRAMMABLE THERMOSTAT. PROVIDE MERV13 FILTERS.

BLOWER COIL - FMA5X18 WALL HUNG FAN COIL (18,000 BTUH), EHK205B 5.0 kW ELECTRIC HEAT (3.8 kW @ 208 VOLTS), MCA = 23.7, 30/2 HACR BREAKER. PROVIDE UNIT MTD. DISCONNECT (600 CFM)

HEAT PUMP CONDENSER - 235SAN18 (18,000 BTUH) SEER2 = 15.2, EER2 = 12, HSPF2 = 8.0. MCA = 10.9, 15/2 HACR BREAKER.

HVAC-2 BRYANT OR APPROVED EQUAL, WALL HUNG FAN COIL WITH SUPPLEMENTARY ELECTRIC HEAT AND HEAT PUMP CONDENSER. PROVIDE AHRI CERTIFICATION SHOWING RATING. PROVIDE A PROGRAMMABLE THERMOSTAT. PROVIDE MERV13 FILTERS.

BLOWER COIL - FMA5X018 WALL HANG FAN COIL (18,000 BTUH), EHK208B 7.5 kW ELECTRIC HEAT (5.6 kW @ 208 VOLTS), MCA = 35.0, 50/2 BREAKER. PROVIDE UNIT MTD. DISCONNECT (600 CFM.)

HEAT PUMP CONDENSER - 235SAN18 (18,000 BTUH) SEER2 = 15.2, EER2 = 12, HSPF2 = 8.0. MCA = 10.9, 15/2 HACR BREAKER.

HVAC-3 BRYANT OR APPROVED EQUAL, WALL HUNG FAN COIL WITH SUPPLEMENTARY ELECTRIC HEAT AND HEAT PUMP CONDENSER. PROVIDE AHRI CERTIFICATION SHOWING RATING. PROVIDE A PROGRAMMABLE THERMOSTAT. PROVIDE MERV13 FILTERS.

BLOWER COIL - FMA5X024 WALL HUNG FAN COIL (24,000 BTUH), EHK21083 7.5 kW ELECTRIC HEAT (5.6 kW @ 208 VOLTS) (5.6 kW @ 208 VOLTS), MCA = 35.0, 50/2 MAX BREAKER. PROVIDE UNIT WITH DISCONNECT. (800 CFM)

HEAT PUMP CONDENSER - 235SAN24 (24,000 BTUH), SEER2 = 15.5, EER2 = 12, HSPF2 = 7.8. ENERGY STAR 6.1 CERTIFIED MCA = 13.5, 20/2 HACR BREAKER.

HVAC-4 FUJITSU OR APPROVED EQUAL, MULTI-ZONE MINI-SPLIT HEAT PUMP AS FOLLOWS:

BLOWER COIL - SLIM DUCT MODEL ADUH9LUASI (370CFM, 208 VOLTS 56W) 9,000 BTUH COOLING 9,000 BTUH HEATING

HVAC-5,6&7 FUJITSU OR APPROVED EQUAL, MULTI-ZONE MINI-SPLIT HEAT PUMP AS FOLLOWS:

BLOWER COIL - SLIM DUCT MODEL ADUH07LUASI (320CFM, 208 VOLTS 32W) 7,000 BTUH COOLING 7,500 BTUH HEATING

HVAC-4&5 CONDENSER
FUJITSU MODEL AOU18RLXFZ, 18,000 BTUH COOLING. MCA = 13, CIRC. BRKR 25/2 SEER = 16, HSPF = 9.0

HVAC-6&7 CONDENSER
FUJITSU, OR APPROVED EQUAL, MODEL AOU18RLXFZ, 18,000 BTUH COOLING, MCA = 13, CIRC. BRKR 25/2, SEER = 16, HSPF = 9.0

HVAC-8&9 BRYANT OR APPROVED EQUAL, FAN COIL WITH SUPPLEMENTARY ELECTRIC HEAT AND HEAT PUMP CONDENSER. PROVIDE LOCKED PROGRAMMABLE THERMOSTAT WITH MERV13 FILTER. SET UNIT ON INSIDE INSULATED RETURN AIR PLENUM. AND CERTIFIED BY MANUFACTURER. PROVIDE AHRI CERTIFICATION SHOWING RATING.

BLOWER COIL - FJ5024 (24,000 BTUH) KFCEH2501C10 - 10 kW (7.6 kW @ 208 VOLTS), 54.5 AMPS MCA, 60/2 HACR MAX BREAKER (800 CFM)

HEAT PUMP CONDENSER - GH5SAN5024 (24,000 BTUH COOLING), (MCA = 13.5 AMPS, MAX BREAKER = 20/2 HACR), 15.5 SEER2, 13.5 EER, HSPF2 = 7.7

HVAC10&11 BRYANT OR APPROVED EQUAL, WALL HUNG FAN COIL WITH SUPPLEMENTARY ELECTRIC HEAT AND HEAT PUMP CONDENSER. PROVIDE AHRI CERTIFICATION SHOWING RATING.

BLOWER COIL - FJ5018 (18,000 BTUH) (5.6 kW @ 208 VOLTS) (EHK 208B) 36.2 MCA HACR MAX BREAKER (700 CFM)

HEAT PUMP CONDENSER - GH5SAN 18 (18,000 BTUH COOLING), (MCA = 10.9 AMPS, MAX BREAKER = 15/2 HACR), 15.5 SEER2, 13.5 EER

## EXHAUST FANS

EF-1 BATH FAN SHALL BE A PANASONIC WHISPER GREEN SELECT FAN MODEL# FV-0511VKS2 (ENERGY STAR RATED) OR APPROVED EQUAL, 50 - 80 - 110 CFM @ 0.3 SONES, WITH MULTI-SPEED MODULE. UNIT SHALL BE ADJUSTABLE FOR CONTINUOUS OPERATION REQUIRED PER ASHRAE 62.2 AND ANY BLOWER DOOR TEST. WALL SWITCH SHALL TURN FAN UP TO HIGHER EXHAUST RATE WHICH SHALL ALSO BE ADJUSTABLE. PROVIDE CEILING RADIANT FIRE DAMPER IN LOCATIONS THAT PENETRATE A RATED CEILING ASSEMBLY.

EF-2 BROAN OR APPROVED EQUAL XB80, 0.3 LOW SONES (80 CFM) EXHAUST WITH CEILING RADIANT FIRE DAMPER. 6" TO 4" REDUCER. RUN 4"Ø AS SHOWN. (ENERGY STAR RATED)

EF-3 BROAN OR APPROVED EQUAL CEILING FAN W/ RADIANT FIRE DAMPER MODEL XB50 50 CFM, 0.3 SONES. (ENERGY STAR RATED) DUCT AS SHOWN AND WIRE FOR CONTINUOUS OPERATION.

EF-4 PANASONIC FV-1115VK3 + FV-VS15VK1 MULTI-SPEED MODULE 90 CFM, 0.3 SONES, 6" DUCT. PROVIDE CEILING RADIATION DAMPER (CRD).

EF-5 PANASONIC FV-1115VK3 + FV-VS15VK1 MULTI-SPEED MODULE 115 CFM, 0.3 SONES, 6" DUCT. PROVIDE CEILING RADIATION DAMPER (CRD).

EF-6 PANASONIC FV-1115VK3 + FV-VS15VK1 MULTI-SPEED MODULE 125 CFM, 0.3 SONES, 6" DUCT. PROVIDE CEILING RADIATION DAMPER (CRD).

## INTAKE & EXHAUST LOUVERS

WALL LOUVERS WALL LOUVERS IN STONE & SIDING SHALL BE HOODED PRE-FINISHED VINYL BY MID-AMERICA COMPANY (W/ BACKDRAFT DAMPER). COLOR TO MATCH STONE & SIDING.

BATH EXHAUST - 4" ROUND HOODED VENT W/ BACK-DRAFT DAMPER & SCREEN.

DRYER EXHAUST - DRYER EXHAUST - 4" ROUND HOODED VENT W/ BACK-DRAFT DAMPER & NO SCREEN.

RANGE EXHAUST - RANGE EXHAUST - 6" ROUND HOODED VENT W/ BACK-DRAFT DAMPER & SCREEN.

FRESH AIR - FRESH AIR - 4" ROUND HOODED VENT W/ LOCKING DAMPER & SCREEN, SEE PLANS.

SOFFIT VENTS SOFFIT VENTS SHALL BE PRE-FINISHED VINYL (WHITE) AS MANUFACTURED BY PRIMEX MANUFACTURING LTD. AS FOLLOWS:

BATH EXHAUST - RDV-4" ROUND W/ SCREEN. USE EB4x90 ELBOW AS NEEDED.

DRYER EXHAUST - SV28NS (NO SCREEN) & BACKDRAFT DAMPER

RANGE EXHAUST - SV28-6" W/ SCREEN & BACKDRAFT DAMPER

FRESH AIR - RDV-4" ROUND W/ SCREEN. USE EB4x90 ELBOW AS NEEDED.

# VENTILATION AIR SCHEDULE

## UNIT FRESH AIR VENTILATION

THE UNITS SHALL COMPLY WITH ASHRAE 62.2 STANDARDS FOR DWELLING UNIT VENTILATION. RATES SHALL COMPLY WITH ASHRAE 4.1.1 FRESH AIR RATES SHALL BE AS FOLLOWS:

ONE BEDROOM = 33.9 CFM
TWO BEDROOM = 48.0 CFM

THE MULTI-SPEED BATH EXHAUST FANS SHALL BE SET TO PROVIDE THESE EXHAUST RATES OR AN ALTERNATE RATING BASED ON A BLOWER DOOR TEST.

| UNIT | COMMON AREAS | PEOPLE OUTDOOR AIR (Rp) | BREATHING ZONE OUTDOOR AIR (Ra) | TOTAL O.A. REQUIRED | TOTAL EXHAUST AIR | TOTAL MAKEUP AIR (PROVIDED) | REMARKS |
|---|---|---|---|---|---|---|---|
| HVAC-4 (4TH FL.) | CORRIDOR | | 48.96 CFM (816 x 0.06) | | | | |
| | MECH. / STORAGE UNOCCUPIED | | 0.57 CFM (9.5 x 0.06) | | | | |
| | TOTAL | | 49.53 CFM | 49.53 CFM | 50 CFM | 50 CFM | |
| HVAC-5 HVAC-6 HVAC-7 | CORRIDOR | | 48.96 CFM (816 x 0.06) | | | | |
| | MECH. / STORAGE UNOCCUPIED | | 0.57 CFM (9.5 x 0.06) | | | | |
| | TOTAL | | 49.53 CFM | 49.53 CFM | 50 CFM | 50 CFM | |
| HVAC-8 | OFFICE | 7.5 CFM (1.5 x 5 CFM) | 9 CFM (150 x 0.06) | 16.5 CFM | 16.5 CFM | | |
| | OFFICE STORAGE UNOCCUPIED | | 4.7 CFM (78.6 x 0.06) | 4.7 CFM | 4.7 CFM | | |
| | LOUNGE | 45 CFM (9 x 5 CFM) | 75.9 CFM (1,265 x 0.06) | 52.59 CFM | 52.59 CFM | | |
| | TOTAL | 52.5 CFM | 93.2 CFM | 73.79 CFM | 73.79 CFM | 80 CFM | EF-2 FAN |
| HVAC-9 | MEN'S R.R | | | | 80 CFM INTERMITTENCE | | |
| | WOMEN'S R.R | | | | 80 CFM INTERMITTENCE | | |
| | COMMUNITY RM. | 75 CFM (15 x 5 CFM) | 13.2 CFM (220 x 0.06) | 88.2 CFM | 90 CFM | 90 CFM | EF-4 FAN |
| | TOTAL | 75 CFM | 13.2 CFM | 88.2 CFM | 90 CFM | 90 CFM | |
| HVAC-10 | EXERCISE | 100 CFM (5 PEOPLE x 20 CFM) | 14.76 CFM (246 x 0.06) | 114.76 CFM | 115 CFM | | |
| | SOCIAL SERVICES | 5 CFM (1 x 5 CFM) | 5.7 CFM (95 x 0.06) | 10.7 CFM | 10 CFM | | |
| | TOTAL | 105 CFM | 20.46 CFM | 125.46 CFM | 125 CFM | 125 CFM | |
| HVAC-11 | LAUNDRY | 10 CFM (2 x 5 CFM) | 6 CFM (100 x 0.06) | 16 CFM | | | |
| | MECH. / STORAGE UNOCCUPIED | | 13.29 CFM (221.5 x 0.06) | 13.29 CFM | | | |
| | CORRIDOR | | 15.93 CFM (265.5 x 0.06) | 15.93 CFM | | | |
| | TOTAL | 10 CFM | 32.22 CFM | 45.22 CFM | 50 CFM | 120 CFM | |

## 2012 IECC HVAC REQUIREMENTS

1. PROVIDE A PROGRAMMABLE THERMOSTAT FOR EACH UNIT.
2. HEAT PUMPS WITH SUPPLEMENT ELECTRIC HEAT SHALL HAVE CONTROLS THAT EXCEPT DURING DEFROST, PREVENT SUPPLEMENTARY HEAT OPERATION WHEN THE HEAT PUMP COMPRESSOR CAN MEET THE HEATING LOAD.
3. SUPPLY DUCTS IN ATTICS SHALL BE INSULATED TO (R=8). ALL OTHERS SHALL BE INSULATED TO (R=6) UNLESS DUCTS, OR PORTIONS THEREOF, ARE LOCATED COMPLETELY INSIDE THE THERMAL ENVELOPE.
4. DUCTS, AIR HANDLERS AND FILTER BOXES SHALL BE SEALED. JOINTS AND SEAMS SHALL COMPLY WITH CODE. DUCT TIGHTNESS SHALL BE VERIFIED BY EITHER A POST CONSTRUCTION OR ROUGH-IN TEST SHOWING A LEAKAGE OR LESS THAN OR EQUAL TO 4 CFM PER 100 SQ.FT. (WORK SHALL BE BY THE HEATING CONTRACTOR OR AT HIS EXPENSE).

## HEATING NOTES

1. PROVIDE CANVAS OR FIBERGLASS ISOLATION SLEEVES ON ALL PLENUM CONNECTIONS TO TRUNK DUCT.
2. ALL RECTANGULAR DUCTWORK SHALL BE GALVANIZED SHEET METAL WITH OUTSIDE WRAP INSULATION TO MEET CURRENT CODE. ALL DUCT SIZES ARE AIR SIZE. EXHAUST DUCTWORK IN ATTIC NEED NOT BE INSULATED, EXCEPT OUTSIDE WRAP FIRST 5 FEET OF EXHAUST DUCTWORK.
3. ALL ROUND DUCTS IN HEATED AREAS SHALL BE GALVANIZED SHEET METAL. ROUND DUCTS IN ATTIC AREAS SHALL BE SHEET METAL WITH EXTERIOR INSULATION WRAP, RIGID INSULATED DUCTS, OR FLEXIBLE INSULATED DUCT. IF FLEXIBLE DUCT IS ALLOWED, IT SHALL BE INSTALLED STRAIGHT AND TRUE WITH A MINIMUM NUMBER OF BENDS SO AS NOT TO INCREASE FRICTION. ANY DUCT RUNS INSTALLED LIKE "SPAGHETTI" SHALL BE REJECTED BY ARCHITECT AND SHALL BE REPLACED WITH RIGID DUCT.
4. PROVIDE BALANCING DAMPERS ON ALL BRANCH DUCTS. DAMPERS SHALL BE INSTALLED IN THE DUCT AT TAKE-OFF FROM THE MAIN DUCT. DAMPERS IN REGISTERS ARE NOT CONSIDERED BALANCING DAMPERS. BALANCING DAMPERS ARE NOT REQUIRED IF DUCTWORK IS NOT ACCESSIBLE.
5. FLEXIBLE DUCTS SHALL BE CUT TO PROPER LENGTHS TO ELIMINATE DUCT COMPRESSION AND/OR EXTRA BENDS. PROPERLY SUPPORT DUCT TO PREVENT SAGGING. FURNACE WIRE SHALL NOT BE USED TO SUPPORT FLEXIBLE DUCT. FLEXIBLE DUCT CONNECTIONS SHALL BE TAPED AND CLAMPED TO ACHIEVE AN AIRTIGHT CONNECTION.
6. CEILING AND WALL REGISTERS SHALL BE SUPPORTED FROM FRAMING STRUCTURE PROVIDE SOLID 2x2 BLOCKING ON ALL SIDES.
7. ALL WORK SHALL BE IN ACCORDANCE WITH CURRENT STATE MECHANICAL AND BUILDING CODES AND ALL APPLICABLE CITY, COUNTY AND LOCAL REGULATIONS.
8. PROVIDE CEILING RADIANT DAMPER (CRD) AND FIRE RATED WALL PENETRATIONS AS REQUIRED BY CODE. FIRE DAMPER WORK SHALL BE REVIEWED WITH BUILDING INSPECTOR DURING ROUGH-IN WORK TO CLARIFY ALL AREAS WHERE DAMPERS ARE REQUIRED.
9. RETURN AIR DUCTS SHALL BE OUTSIDE WRAPPED INSULATED AS LISTED IN NOTES 2 &3 ABOVE. RETURN AIR PLENUMS IN HEATED AREAS SHALL BE INSIDE INSULATED WITH 1" SOUND INSULATION LINER.
10. EXHAUST FANS SHALL BE SUPPORTED FROM THE ROOF TRUSS CONSTRUCTION WITH VIBRATION ISOLATION HANGERS TO PREVENT SOUND AND VIBRATION TRANSMISSION.
11. PIPE CONDENSATE TO ABOVE FLOOR DRAIN OR WATER HEATER DRAIN PAN. CONDENSATE DRAINS SHALL BE ADEQUATELY SECURED TO CEILING AND WALLS AND SHALL BE SLOPED AS REQUIRED. CARE SHALL BE TAKEN THAT DRAIN PANS SLOPE TO DRAIN. ALL CONDENSATE PIPING SHALL BE LEAK TESTED PRIOR TO INSTALLATION OF DRYWALL. PROVIDE TRAP.
12. HEATING CONTRACTOR SHALL DO ONE (1) COMPLETE ROUGH-IN OF EACH TYPE UNIT FOR REVIEW AND APPROVAL. INSTALLATION SHALL BE REVIEWED BY THE ARCHITECT AND COORDINATED WITH OTHER TRADES. ALL CONFLICTS SHALL BE RESOLVED AND FINAL INSTALLATION SHALL BE APPROVED PRIOR TO PROCEEDING WITH LIKE UNITS.
13. THE ENTIRE DUCTWORK SYSTEM SHALL BE INSTALLED PER S.M.A.C.N.A.-HVAC DUCT CONSTRUCTION STANDARDS.
14. WHERE THE EXHAUST DUCT EQUIVALENT LENGTH EXCEEDS 35FT, AND THE DUCT IS CONCEALED WITHIN THE BUILDING CONSTRUCTION, THE EQUIVALENT LENGTH SHALL BE IDENTIFIED ON A LABEL LOCATED WITHIN 6FT OF THE CONNECTION.


KONTOGIANNIS & ASSOCIATES

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PROJECT:

TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

HVAC EQUIPMENT, NOTES & DETAILS

DATE: 06/26/2026
REVISED:

GEORGE J. KONTOGIANNIS REGISTERED No. AR00034309 STATE OF INDIANA ARCHITECT

GEORGE J. KONTOGIANNIS, LICENSE #AR00034309
EXPIRATION DATE 12/31/2027


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- ☐ SUBMISSION SET 06/27/2025
- ☐ ZONING SET 05/07/2026
- ■ BID SET 06/26/2026
- ☐ PERMIT SET
- ☐ CONSTRUCTION SET

H3-1


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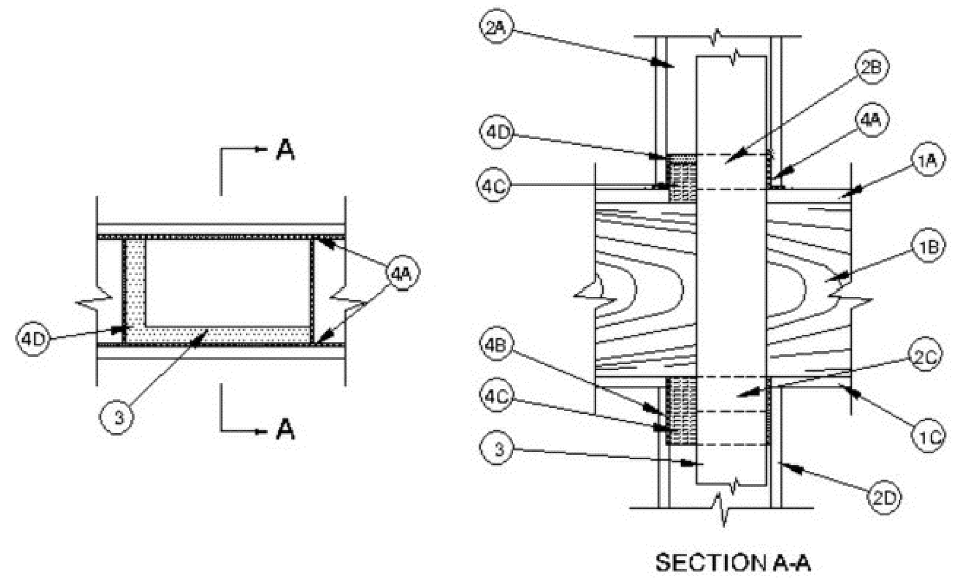
## SYSTEM NO. F-C-7012

APRIL 8, 2008

F RATINGS - 1 HR

T RATINGS - 1/4 HR




1.**FLOOR-CEILING ASSEMBLY --** THE 1 HR FIRE-RATED SOLID OR TRUSSED LUMBER JOIST FLOOR-CEILING ASSEMBLY SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER DESCRIBED IN THE INDIVIDUAL L500 SERIES DESIGN IN THE UL FIRE RESISTANCE DIRECTORY. THE GENERAL CONSTRUCTION FEATURES OF THE FLOOR-CEILING ASSEMBLY ARE SUMMARIZED BELOW:

A. **FLOORING SYSTEM --** LUMBER OR PLYWOOD SUBFLOOR WITH FINISH FLOOR OF LUMBER, PLYWOOD OR **FLOOR TOPPING MIXTURE*** AS SPECIFIED IN THE INDIVIDUAL FLOOR-CEILING DESIGN. MAX SIZE OF OPENING IS 5-1/2 BY 14 IN. (140 BY 356 MM).

B. **WOOD JOISTS* --** NOM 10 IN. (254 MM) DEEP (OR DEEPER) LUMBER, STEEL OR COMBINATION LUMBER AND STEEL JOISTS, TRUSSES OR **STRUCTURAL WOOD MEMBERS*** WITH BRIDGING AS REQUIRED AND WITH ENDS FIRESTOPPED.

C. **GYPSUM BOARD* --** THICKNESS, TYPE, NUMBER OF LAYERS AND FASTENERS SHALL BE AS SPECIFIED IN INDIVIDUAL FLOOR-CEILING DESIGN.

2.**CHASE WALL --** THE THROUGH PENETRANT (ITEM NO. 3) SHALL BE ROUTED THROUGH A FIRE-RATED SINGLE, DOUBLE OR STAGGERED WOOD STUD/GYPSUM WALLBOARD CHASE WALL HAVING A FIRE RATING CONSISTENT WITH THAT OF THE FLOOR-CEILING ASSEMBLY. THE CHASE WALL SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER SPECIFIED IN THE INDIVIDUAL U300 SERIES WALL AND PARTITION DESIGNS IN THE UL FIRE RESISTANCE DIRECTORY AND SHALL INCLUDE THE FOLLOWING CONSTRUCTION FEATURES:

A. **STUDS --** NOM 2 BY 6 IN. (51 BY 152 MM) OR DOUBLE NOM 2 BY 4 IN. (51 BY 102 MM) LUMBER STUDS.

B. **SOLE PLATE --** NOM 2 BY 6 IN. (51 BY 152 MM) OR PARALLEL 2 BY 4 IN. LUMBER PLATES, TIGHTLY BUTTED. MAX SIZE OF OPENING IS 5-1/2 BY 14 IN. (140 BY 356 MM).

C. **TOP PLATE --** THE DOUBLE TOP PLATE SHALL CONSIST OF TWO NOM 2 BY 6 IN. (51 BY 152 MM) OR TWO SETS OF PARALLEL 2 BY 4 IN. (51 BY 102 MM) LUMBER PLATES, TIGHTLY BUTTED. MAX SIZE OF OPENING IS 5-1/2 BY 14 IN. (140 BY 356 MM).

D. **GYPSUM BOARD* --** THICKNESS, TYPE, NUMBER OF LAYERS AND FASTENERS SHALL BE AS SPECIFIED IN INDIVIDUAL WALL AND PARTITION DESIGN.

3.**STEEL DUCT --** NOM 12 BY 4 IN. (305 BY 102 MM) (OR SMALLER) NO. 30 GAUGE (OR HEAVIER) RECTANGULAR GALVANIZED STEEL DUCT TO BE INSTALLED ECCENTRICALLY OR CONCENTRICALLY WITHIN THE FIRESTOP SYSTEM. THE ANNULAR SPACE BETWEEN THE DUCT AND THE PERIPHERY OF OPENING SHALL BE MIN 0 IN. (POINT CONTACT) TO MAX 2 IN. (51 MM). DUCT TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR-CEILING ASSEMBLY.

4.**FIRESTOP SYSTEM --** THE FIRESTOP SYSTEM SHALL CONSIST OF THE FOLLOWING:

A. **RETAINING ANGLES --** MIN 1 BY 1-1/2 IN. (25 BY 38 MM) 16 GAUGE (OR HEAVIER) STEEL ANGLES USED TO BRIDGE OPENING ON BOTH SIDES OF WALL AT SOLE PLATE IN SINGLE STUD WALLS WHEN SOLE PLATE IS REMOVED AT OPENING IN PLYWOOD FLOOR. ANGLES TO BE CUT TO OVERLAP A MIN OF 2 IN. (51 MM) ONTO SOLE PLATE ON EACH SIDE OF OPENING WITH THE 1-1/2 IN. (38 MM) LEG OF ANGLE SECURED TO SOLE PLATE WITH A MIN OF TWO NAILS OR SCREWS ON EACH SIDE OF OPENING AND ON BOTH SIDES OF WALL.

B. **STEEL PLATES --** MIN 3 IN. (76 MM) WIDE 16 GAUGE (OR HEAVIER) STEEL PLATES USED TO BRIDGE OPENING ON BOTH SIDES OF WALL AT DOUBLE TOP PLATE IN SINGLE STUD WALLS WHEN TOP PLATES ARE REMOVED AT OPENING. PLATES TO BE CUT TO OVERLAP A MIN OF 2 IN. (51 MM) ONTO TOP PLATES ON EACH SIDE OF OPENING AND SECURED TO TOP PLATES WITH A MIN OF TWO NAILS OR SCREWS ON EACH SIDE OF OPENING AND ON BOTH SIDES OF WALL.

C. **PACKING MATERIAL --** MIN 1-3/4 IN. (44 MM) THICKNESS OF 4 PCF (64 KG/M$^3$) MINERAL WOOL BATT INSULATION FIRMLY PACKED INTO THE OPENING WITHIN THE SOLE PLATE/PLYWOOD SUBFLOOR AND A MIN 3 IN. (76 MM) THICKNESS OF 4 PCF (64 KG/M$^3$) MINERAL WOOL BATT INSULATION FIRMLY PACKED INTO THE OPENING WITHIN THE TOP PLATE. THE PACKING MATERIAL TO BE RECESSED FROM TOP SURFACE OF SOLE PLATE TO ACCOMMODATE THE REQUIRED THICKNESS OF FILL MATERIAL (ITEM 4D).

D. **FILL, VOID OR CAVITY MATERIALS* -- SEALANT --** MIN 1/2 IN. (13 MM) THICKNESS OF SEALANT APPLIED WITHIN THE ANNULUS, FLUSH WITH TOP SURFACE OF SOLE PLATE. AT THE POINT CONTACT LOCATION BETWEEN DUCT AND SOLE PLATE, A MIN 1/2 IN. (13 MM) DIAM BEAD OF SEALANT SHALL BE APPLIED AT THE DUCT/SOLE PLATE INTERFACE ON TOP SURFACE OF PLATE. AT THE POINT CONTACT LOCATION BETWEEN DUCT AND RETAINING ANGLE, A MIN 1/8 IN. (3.2 MM) DIAM BEAD OF SEALANT SHALL BE APPLIED AT THE DUCT/RETAINING ANGLE INTERFACE ON TOP SURFACE OF PLATE.

**PASSIVE FIRE PROTECTION PARTNERS** -- 3600EX, 4800DW

*** INDICATES SUCH PRODUCTS SHALL BEAR THE UL OR CUL CERTIFICATION MARK FOR JURISDICTIONS EMPLOYING THE UL OR CUL CERTIFICATION (SUCH AS CANADA), RESPECTIVELY.**

LAST UPDATED ON 2008-04-08

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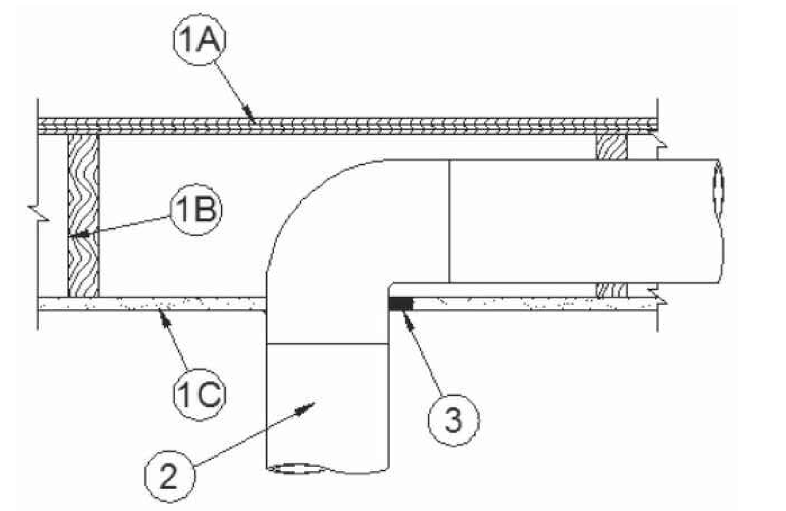
## FLOOR PENETRATION
## U.L. SYSTEM NO. F-C-7012

## SYSTEM NO. F-C-7060

JANUARY 06, 2015

| ANSI/UL1479 (ASTM E814) | CAN/ULC S115 |
|---|---|
| F Ratings - 1 Hr | F Ratings - 1 Hr |
| T Rating - 1 Hr | FT Rating - 1 Hr |
| L Rating At Ambient — Less Than 1 CFM/sq ft | FH Ratings - 1 Hr |
| | FTH Rating - 1 Hr |
| | L Rating At Ambient — Less Than 1 CFM/sq ft |




1.**FLOOR -- CEILING ASSEMBLY --** THE 1 HR FIRE-RATED WOOD JOIST FLOOR-CEILING ASSEMBLY SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER SPECIFIED IN THE INDIVIDUAL L500 DESIGNS IN THE UL FIRE RESISTANCE DIRECTORY, AS SUMMARIZED BELOW:

A. **FLOORING SYSTEM --** LUMBER OR PLYWOOD SUBFLOOR WITH FINISH FLOOR OF LUMBER, PLYWOOD OR **FLOOR TOPPING MIXTURE*** AS SPECIFIED IN THE INDIVIDUAL FLOOR-CEILING DESIGN.

B. **WOOD JOISTS --** NOM 10 IN. (254 MM) DEEP (OR DEEPER) LUMBER, STEEL OR COMBINATION LUMBER AND STEEL JOISTS, TRUSSES OR **STRUCTURAL WOOD MEMBERS*** WITH BRIDGING AS REQUIRED AND WITH ENDS FIRESTOPPED.

C. **GYPSUM BOARD* --** THICKNESS, TYPE, NUMBER OF LAYERS AND FASTENERS AS REQUIRED IN THE INDIVIDUAL FLOOR-CEILING DESIGN. DIAM OF OPENING IS TO BE MAX 1-1/2 IN. (38 MM) LARGER THAN DIAM OF STEEL DUCT.

1A. **CHASE WALL --** (OPTIONAL, NOT SHOWN) -- THE THROUGH PENETRANT (ITEM 2) MAY BE ROUTED THROUGH A 1 HR FIRE RATED SINGLE, DOUBLE OR STAGGERED WOOD STUD/GYPSUM BOARD CHASE WALL. DEPTH OF CHASE WALL STUD CAVITY TO BE MIN 1/2 IN. (13 MM) GREATER THAN DIAMETER OF OPENING CUT IN TOP PLATES TO ACCOMMODATE THE THROUGH PENETRANT (ITEM 2). THE CHASE WALL SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER SPECIFIED IN THE INDIVIDUAL U300 SERIES WALL AND PARTITION DESIGNS IN THE UL FIRE RESISTANCE DIRECTORY AND SHALL INCLUDE THE FOLLOWING CONSTRUCTION FEATURES:

A. **STUDS --** NOM 2 BY 4 IN. (51 BY 102 MM), 2 BY 6 IN. (51 BY 152 MM) OR DOUBLE NOM 2 BY 4 IN. (51 BY 102 MM) LUMBER STUDS.

B. **SOLE PLATE --** NOM 2 BY 4 IN. (51 BY 102 MM), 2 BY 6 IN. (51 BY 152 MM)OR PARALLEL 2 BY 4 IN. (51 BY 102 MM) LUMBER PLATES, TIGHTLY BUTTED.

C. **TOP PLATE --** THE DOUBLE TOP PLATE SHALL CONSIST OF TWO NOM 2 BY 4 IN (51 BY 102 MM)., TWO NOM 2 BY 6 IN. (51 BY 152 MM) OR TWO SETS OF PARALLEL 2 BY 4 IN. (51 BY 102 MM) LUMBER PLATES, TIGHTLY BUTTED. DIAM OF OPENING IS TO BE MAX 1-1/2 IN. (38 MM) LARGER THAN DIAM OF STEEL DUCT. AS AN ALTERNATE, THE OPENING MAY BE SQUARE-CUT WITH A MAX DIMENSION 1-1/2 IN. (38 MM) GREATER THAN THE DIAM OF THE PIPE. PLATES MAY BE DISCONTINUOUS OVER OPENING, TERMINATING AT TWO OPPOSING EDGES OF OPENING. MAX LENGTH OF DISCONTINUITY IS 7-1/2 IN. (191 MM).

D. **STEEL PLATE --** WHEN LUMBER PLATES ARE DISCONTINUOUS, NOM 1-1/2 IN. (38 MM) WIDE NO. 20 GAUGE (OR HEAVIER) GALV STEEL PLATES SHALL BE INSTALLED TO CONNECT DISCONTINUOUS LUMBER PLATES AND TO PROVIDE A FORM FOR THE FILL MATERIAL. STEEL PLATES SIZED TO LAP 2 IN. (51 MM) ONTO EACH DISCONTINUOUS LUMBER PLATE AND SECURED TO LUMBER PLATES WITH STEEL SCREWS OR NAILS.

E. **GYPSUM BOARD* --** THICKNESS, TYPE, NUMBER OF LAYERS AND FASTENERS SHALL BE AS SPECIFIED IN THE INDIVIDUAL WALL AND PARTITION DESIGN.

2.**STEEL DUCT --** ONE NOM 6 IN. (152 MM) DIAM (OR SMALLER) NO. 30 GA (OR HEAVIER) GALVANIZED STEEL DUCT TO BE INSTALLED EITHER CONCENTRICALLY OR ECCENTRICALLY WITHIN THE OPENING. ANNULAR SPACE TO BE MIN 0 IN. (POINT CONTACT) TO MAX 1-1/2 IN. (38 MM). STEEL DUCT TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR-CEILING ASSEMBLY.

3.**FILL, VOID OR CAVITY MATERIAL* -- SEALANT --** MIN 5/8 IN. (16 MM) THICKNESS OF FILL MATERIAL APPLIED WITHIN THE ANNULUS, FLUSH WITH BOTTOM SURFACE OF CEILING OR TOP PLATE. MIN 1/4 IN. (6 MM) DIAM BEAD OF FILL MATERIAL APPLIED AT POINT CONTACT LOCATION AT THE PENETRANT/CEILING OR CHASE WALL TOP PLATE INTERFACE.

**SPECIFIED TECHNOLOGIES INC** -- SPECSEAL LCI SEALANT, SPECSEAL LC150 SEALANT OR TYPE WF300 CAULK

* INDICATES SUCH PRODUCTS SHALL BEAR THE UL OR CUL CERTIFICATION MARK FOR JURISDICTIONS EMPLOYING THE UL OR CUL CERTIFICATION (SUCH AS CANADA), RESPECTIVELY.

LAST UPDATED ON 2015-01-06

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## FLOOR PENETRATION
## U.L. SYSTEM NO. F-C-7060

SEE FIRE RESISTANCE RATINGS SHEETS FOR FIRE DAMPER RATING FOR 1 HOUR FLOOR/CEILING ASSEMBLY U.L. DESIGN NO. L563

SEE FIRE RESISTANCE RATINGS SHEETS FOR FIRE DAMPER RATING FOR 1 HOUR ROOF/CEILING ASSEMBLY U.L. DESIGN NO. P522

## LLOYD INDUSTRIES INC.

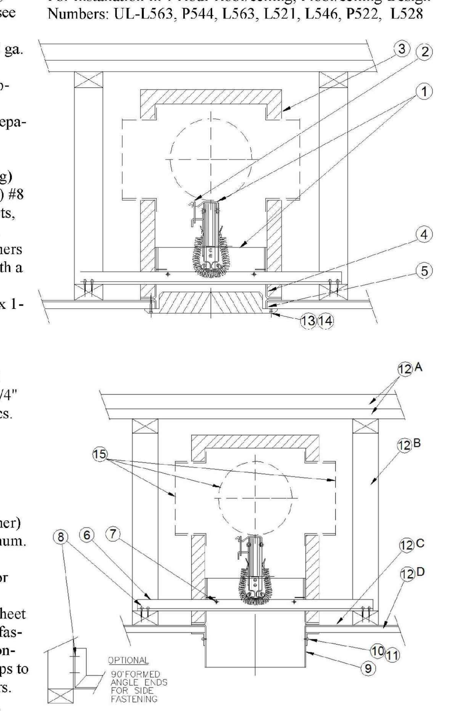
WWW.FIREDAMPER.COM

### INSTALLATION INSTRUCTION

Model:
CRD 50-FGPB-4.2 & CRD 50-EA-FGPB-4.2 for register & grille installations
CRD 50-FGPB-4.2 & CRD 50-EA-FGPB-4.2 for drop thru duct installations
CRD 50-FGPB-4.2-CP & CRD 50-EA-FGPB-4.2-CP for register & grille installations
CRD 50-FGPB-4.2-CP & CRD 50-EA-FGPB-4.2-CP for drop thru duct installations
CRD 50-FGPB-6.0-NI & CRD 50-EA-FGPB-6.0-NI for register & grille installations
CRD 50-FGPB-6.0-NI & CRD 50-EA-FGPB-6.0-NI for drop thru duct installations

(1) Lloyd Industries UL 555-C listed ceiling radiation damper
(2) Easy access or std fusible link (165°F std)(212°F optional)
(3) Fiberglass ductboard plenum box (UL rated 181 class 1)(see note)
(4) Damper sleeve: flanged for plenum insulation support (22 ga. galv. steel)
(5) Register/grille sleeve 22 ga. galv. steel. (for 5/8" thick gypsum)
(6) Support angles (2) per unit: factory installed or supplied separately
  A. std. (16 ga. galvanized steel 3/4" x 3/4" x 26" lg)
  B. optional (22 ga. galvanized 1-1/2" x 1-1/2" x 26" lg)
(7) Support angle fasteners (fastens support angles to damper) #8 x 3/4" lg steel sheet metal screws, 3/16 diameter steel rivets, or spot welds. (2) places on each support angle minimum. when the (4) adjustable angle brackets are used, use fasteners above and secure support angles to adjustable brackets with a minimum of (1) fastener for each bracket.
(8) Support angle fasteners (angles to truss cords) #8 or #10 x 1-1/2" lg steel sheet metal or drywall screws or #6 common nails (8) plcs.
(9) Drop duct sleeve 22 ga. galv. steel
(10) Drop duct mounting angles (4) 22 ga. x 1" x 1" galv. steel
(11) Drop duct angle fasteners (angles to sleeve) #8 or #10 x 3/4" lg steel sheet metal screws or 3/16" steel pop rivets (8) plcs.
(12) Ref: design l-563 wood truss ASM:
  A. deck/roof materials
  B. truss wood cords
  C. RC channel
  D. gypsum board 5/8" thick minimum
(13) Register/grille (26 ga steel min)(.55 mm) (provided by other)
(14) Register/grille steel mounting screws (2) #8 x 2" lg minimum. (provided by other)
(15) Flexible duct and duct connectors: UL Classified class 0 or class 1 (provided and installed by other)
(16) Boot clip installation permitted using (2) #8 or #10 steel sheet metal screws. use a min of (2) #8 "s" type steel screws to fasten to truss cords at each mounting point. use (2) crimp connections or hardware above to fasten non-locking boot clips to the flange. locking boot clip do not require flange fasteners.

These Damper Assemblies Have Been Tested And Approved For Installation In 1 Hour Roof/ceiling, Floor/ceiling Design Numbers: UL-L563, P544, L563, L521, L546, P522, L528




INSTALLATION INSTRUCTIONS AND THE PRODUCTS SPECIFIED, ARE IN CONFORMANCE TO ALL OF UNDERWRITERS LABORATORIES REQUIREMENTS 555C

All installations are subject to local authority approval prior to ordering and installing dampers

231 Commerce Dr. Montgomeryville, PA 18936 Tel: 215-412-4445 Fax: 215-412-4409 Email: lloydind@firedamper.com
138 Industrial Loop West, Orange Park, FL 32073 Tel: 904-541-1655 Fax: 904-541-1657 Email: lloydind1@bellsouth.net
B1, 4/F., Luen Ming Hing Factory Building 36 Mok Cheong St., To Kwa Wan, Kowloon, H. K. Tel: 852-2760-4188 Fax: 852-2760-4177 Email: tatanlexyim@lloydasia.com

Website: www.firedamper.com

*ALL STATED SPECIFICATIONS ARE SUBJECT TO UPDATE WITHOUT NOTICE OR OBLIGATION.



Lloyd Industries Inc. 2013

## LLOYD INDUSTRIES INC.

WWW.FIREDAMPER.COM

### INSTALLATION INSTRUCTION

Model:
CRD 50-FGPB-4.2 & CRD 50-EA-FGPB-4.2 for register & grille installations
CRD 50-FGPB-4.2 & CRD 50-EA-FGPB-4.2 for drop thru duct installations
CRD 50-FGPB-4.2-CP & CRD 50-EA-FGPB-4.2-CP for register & grille installations
CRD 50-FGPB-4.2-CP & CRD 50-EA-FGPB-4.2-CP for drop thru duct installations
CRD 50-FGPB-6.0-NI & CRD 50-EA-FGPB-6.0-NI for register & grille installations
CRD 50-FGPB-6.0-NI & CRD 50-EA-FGPB-6.0-NI for drop thru duct installations

1. Before installing the damper assembly, open the ceiling radiation damper blades and secure the blades open with the easy access wire catch and the temperature rated fusible link.
2. Ceiling penetrations should be located between adjacent trusses and RC Channels using a s a minimum of 1-3/4" from the truss to the outside of the plenum box as shown. If required (1) RC Channel may be cut to allow installation. The clearance between the damper/sleeve and the gypsum ceiling material must not exceed 1/16" per side and 1/8" total max.
3. Installation:
   A. If support angles have been provided pre-assembled to the units by the factory, center dampers between trusses and locate support angle rails on top of the lower truss cords. Fasten using a minimum of (2) #8, or #10 wood or drywall steel screws X 1-1/2" lg or #6 common nails at each mounting point.
   B. Support angles may be cut and formed 90° for truss side mounting inside truss cords as shown.
   C. If support angles have been provided separate from the unit, establish the dimension for the gypsum flange location to the top of the lower truss cord and fasten (2) support angles to units using (2) #8 x 3/4" lg steel sheet metal screws or (2) 3/16" diameter steel rivets for each angle. **NOTE: Insure that fasteners do not interfere with the ceiling radiation damper operation.**
5. The Fiberglass insulation plenum box permits cutting and installing a maximum of (3) collars for class 1 or class 0 flexible ducting. Use UL 181 Class 1 reinforced 2" wide aluminum Tape where required for assembly and box/duct sealing. **NOTE: Duct and collar installation must not interfere with damper operation inside the fiberglass ductboard plenum box.**
6. Registers/grilles of steel construction with 26 ga. (.55 mm) minimum are to be attached to the ceiling radiation damper gypsum flange using (2) #8 x 2" lg steel sheet metal screws minimum. (1) at each end of the grille/register minimum.
7. Drop duct installations require 22 ga. 1" x 1" retaining angles on all (4) sides fastened to the steel drop duct sleeve using (2) #8 x 3/4" lg steel sheet metal or 3/16" diameter steel rivets on each side as shown.

INSTALLATION INSTRUCTIONS AND THE PRODUCTS SPECIFIED, ARE IN CONFORMANCE TO ALL OF UNDERWRITERS LABORATORIES REQUIREMENTS 555C

All installations are subject to local authority approval prior to ordering and installing dampers

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138 Industrial Loop West, Orange Park, FL 32073 Tel: 904-541-1655 Fax: 904-541-1657 Email: lloydind1@bellsouth.net
B1, 4/F., Luen Ming Hing Factory Building 36 Mok Cheong St., To Kwa Wan, Kowloon, H. K. Tel: 852-2760-4188 Fax: 852-2760-4177 Email: tatanlexyim@lloydasia.com

Website: www.firedamper.com

*ALL STATED SPECIFICATIONS ARE SUBJECT TO UPDATE WITHOUT NOTICE OR OBLIGATION.

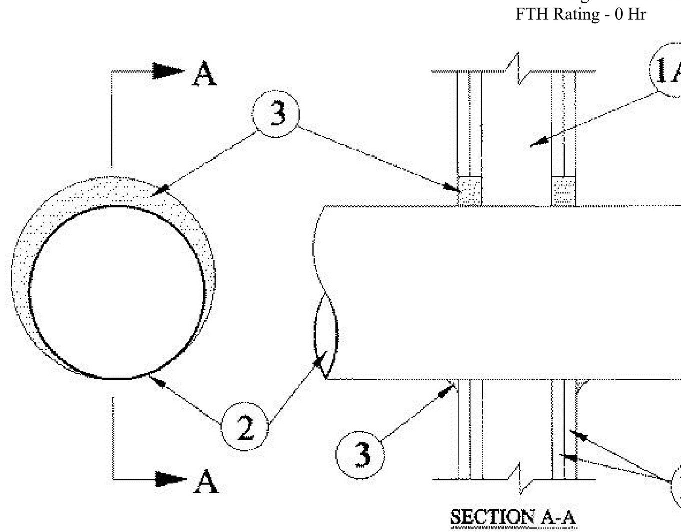


Lloyd Industries Inc. 2013

## System No. W-L-7042

October 12, 2017

| ANSI/UL1479 (ASTM E814) | CAN/ULC S115 |
|---|---|
| F Ratings - 1 and 2 Hr (See Items 1 and 3) | F Ratings - 1 and 2 Hr (See Items 1 and 3) |
| T Rating - 0 Hr | FT Rating - 0 Hr |
| | FH Ratings - 1 and 2 Hr (See Items 1 and 3) |
| | FTH Rating - 0 Hr |




1. **Wall Assembly --** The 1 or 2 hr fire rated wallboard/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U300, U400, V400 or W400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features.

A. **Studs --** Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. (51 by 102 mm) lumber spaced 16 in. (406 mm) OC. Steel studs to be min 2-1/2 in. (64 mm) wide and spaced 24 in. (610 mm) OC. Additional framing members shall be used to completely frame the opening for all ducts greater than 20 in. (502 mm) diam.

B. **Gypsum Board* --** For 1 hr assembly, one layer of min 5/8 in. (16 mm) thick wallboard as required in the individual Wall and Partition Design. For 2 hr assembly, two layers of min 5/8 in. (16 mm) thick wallboard as required in the individual Wall and Partition Design. Max diam of opening is 14-1/2 in. (368 mm) for wood stud walls and 25-1/2 in. (648 mm) for steel stud walls.

**The hourly F and FH Ratings of the firestop system are equal to the hourly fire rating of the wall assembly in which it is installed.**

2.**Through Penetrant --** Galv steel duct to be installed concentrically or eccentrically within the firestop system. The annular space between the duct and periphery of opening shall be 0 in. (0 mm, point contact) and max 1-1/2 in. (64 mm) Duct to be rigidly supported on both sides of wall assembly.

A. **Spiral Wound HVAC Duct --** Nom 24 in. ( 610 mm) diam (or smaller) No. 28 MSG (or heavier) galv steel spriral wound duct.

B. **Sheet Metal Duct --** Nom 12 in. (305 mm) diam (or smaller) No. 28 MSG (or heavier) galv sheet steel duct.

3.**Fill, Void or Cavity Material*--Sealant --** Min 5/8 in. (16 mm) and 1-1/4 in. (32 mm) thickness of fill material applied within annulus, flush with both surfaces of wall assembly for 1 and 2 hr F Ratings, respectively. When FS-ONE Max is used, min 5/8 in. (16mm) thickness for both 1 and 2 hr F Ratings. At the point contact location between duct and wallboard, a min 1/2 in. (13 mm) diam bead of sealant shall be applied at the wallboard/duct interface on both surfaces of wall assembly.

**HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC** -- CP601S Elastomeric Firestop Sealant, FS-ONE Sealant, FS-ONE MAX Intumescent Sealant or CP606 Flexible Firestop Sealant

*** Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**

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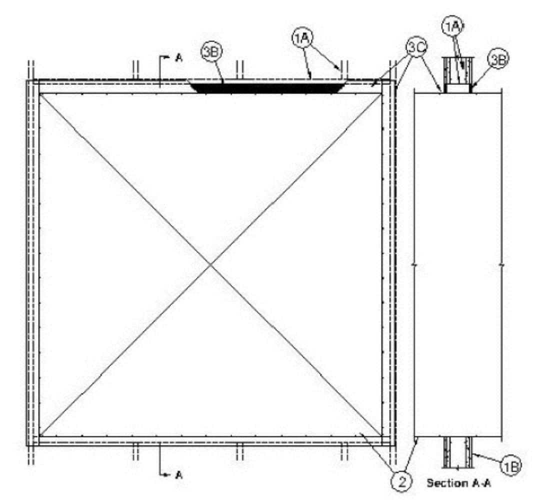
## WALL PENETRATION
## U.L. SYSTEM NO. W-L-7042

## System No. W-L-7155

December 26, 2017

| ANSI/UL1479 (ASTM E814) | CAN/ULC S115 |
|---|---|
| F Ratings -- 1 and 2 Hr (See Item 1) | F Ratings -- 1 and 2 Hr (See Item 1) |
| T Ratings -- 0 Hr | FT Ratings -- 0 Hr |
| L Rating at Ambient -- Less Than 1 CFM/sq ft | FH Ratings -- 1 and 2 Hr (See Item 1) |
| L Rating at 400 F -- Less Than 1 CFM/sq ft | FTH Ratings -- 0 Hr |
| | L Rating at Ambient -- Less Than 1 CFM/sq ft |
| | L Rating at 400 F -- Less Than 1 CFM/sq ft |




1. **Wall Assembly --** The 1 or 2 hr fire-rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner described in the individual U400, V400 or W400 Series Wall or Partition Design in the UL Fire Resistance Directory and shall include the following construction features:

A. **Studs --** Wall framing shall consist of min 3-1/2 in. (89 mm) wide steel channel studs spaced max 24 in. (610 mm) OC. Additional steel studs shall be used to completely frame the opening.

B. **Gypsum Board* --** 5/8 in. (16 mm) thick, 4 ft (1.22 m) wide with square or tapered edges. The gypsum board type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual Wall and Partition Design in the UL Fire Resistance Directory. Max area of opening is 73.7 sq ft (6.85 m$^2$) with a max dimension of 104 in. (2.64 m).

**The hourly F and FH Ratings of the firestop system are equal to the hourly fire rating of the wall assembly in which it is installed.**

2.**Steel Duct --** Max 100 in. by 100 in. (2.5 by 2.5 m) galv steel duct to be installed either concentrically or eccentrically within the firestop system. The duct shall be constructed and reinforced in accordance with SMACNA construction standards. The space between the steel duct and periphery of opening shall be min 0 in. (point contact) to max 2 in. (51 mm). Steel duct to be rigidly supported on both sides of the wall assembly.

2A1. **Through-Pentrating Product* --** As an alterate to Item 2. Fiber cement with galvanized steel facing, 3/8 in.(10 mm) thick composite metallic duct, with a max cross-sectional area of 43.0 sq ft, (4 m$^2$) and a max individual dimension of 78 3/4 in. (2 m). Duct to be installed either concentrically or eccentrically within the firestop system such that the annular space is min 0 in. (point contact) to max 2 in. (51 mm). Duct to be rigidly supported on both sides of wall assembly. Refer to Ventilation Duct Assemblies in Vol. 2 of the Fire Resistance Directory.

**DURASYSTEMS BARRIERS INC** -- Type DuraDuct HP.

2A3. **Through-Pentrating Product* --** As an alternate to Item 2. Galvanized steel faced duct panel, with a max cross-sectional area of 2450 sq in. (1.58 m$^2$), and a max individual dimension of 49-1/2 in. (1258 mm) Duct to be installed either concentrically or eccentrically within the firestop system such that the annular space is min 0 in. (point contact) to max 2 in. (51 mm). Duct to be rigidly supported on both sides wall assembly. Refer to Ventilation Duct Assemblies in Vol. 2 of the Fire Resistance Directory.

**DURASYSTEMS BARRIERS INC** -- Type DuraDuct GNX.

2A4. **Through-Penetrants -- Coated Ducts* --** As an alternate to Item 2, rectangular steel air duct supplied coated with BW11 coating material. Max 40 by 40 in. (1.02 by 1.02 m) duct size. One duct to be installed within the firestop system with an annular space of min 0 in. (point contact) to max 2 in. (51 mm). Reinforcement stiffener or transverse joint with bolted flanges shall be located approximately at the mid depth of the annular space. Duct to be rigidly supported on both sides of the wall assembly. Duct sections shall be assembled using bolted flanges or SMACNA approved Transverse Joint Reinforcements.

**FIRESPRAY INTERNATIONAL LTD** -- FLAMEBAR BW11 FIRE RATED DUCTWORK

3 **Firestop System --** The firestop system shall consist of the following:

A. **Packing Material --** (Optional, Not Shown) -- Polyethylene backer rod, mineral wool batt insulation or fiberglass batt insulation friction fitted into annular space. Packing material to be recessed from both surfaces of wall to accommodate the required thickness of fill material.

A1. **Packing Material --** Required as specified in Table below. Min 3-3/4 in. (95 mm) or 5 in. (127 mm) thickness of min 4 pcf (64 kg/m$^3$) mineral wool batt insulation firmly packed into opening as a permanent form for 1 and 2 hr rated assemblies, respectively. Packing material to be recessed from both surfaces of wall to accommodate the required thickness of fill material.

B. **Fill, Void or Cavity Material* -- Sealant --** Min 5/8 in. (16 mm) thickness of fill material applied within the annulus, flush with both surfaces of wall. Min 1/4 in. (6 mm) diam bead of fill material shall be applied at the point contact location between the steel duct or coated duct and the gypsum board.

**HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC** -- CFS-S SIL GG Sealant, FS-ONE Sealant, FS-ONE MAX Intumescent Sealant or CP606 Flexible Firestop Sealant

C. **Steel Retaining Angles --** Min No. 16 gauge galv steel angles sized to lap steel duct a min of 2 in. (51 mm) and to lap wall surfaces a min of 1 in. (25 mm). When max duct dimension does not exceed 48 in. (122 cm) and duct area does not exceed 1300 in$^2$ (8387 cm$^2$), angles may be min No. 18 gauge galv steel. Angles attached to steel duct or coated duct on both sides of wall with min No. 10 by 1/2 in. (13 mm) long steel sheet metal screws located a max of 1 in. (25 mm) from each end of steel duct and spaced a max of 6 in. (152 mm) OC. Steel angles are optional for those sides of duct that do not exceed the dimension specified in Table below, dependent on packing material, sealant and annular space as specified.

| Max Duct Dimension | Duct Thickness | Annular Space | Sealant | Packing Material | Angle (Item 3C) Required |
|---|---|---|---|---|---|
| 24 in. (610 mm) | 24 ga or heavier | 1/2 in. min to 1 in. max (13 to 25 mm) | FS-ONE Sealant or CP606 Flexible Firestop Sealant | Item 3A1 | No |

*** Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**

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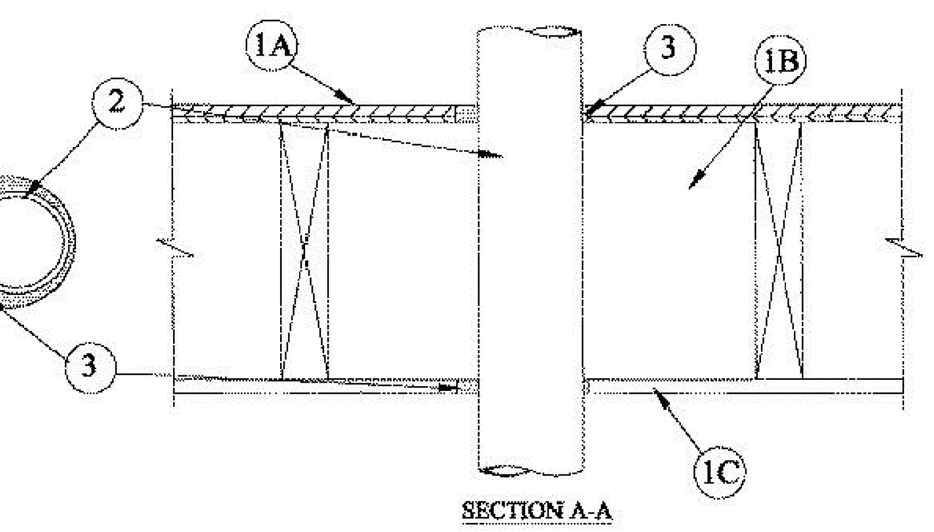
## WALL PENETRATION
## U.L. SYSTEM NO. W-L-7155

## SYSTEM NO. F-C-7013

JANUARY 20, 2015

| ANSI/UL1479 (ASTM E814) | CAN/ULC S115 |
|---|---|
| F Rating - 1 Hr | F Rating - 1 Hr |
| T Rating - 0 Hr | FT Rating - 0 Hr |
| | FH Ratings - 1 Hr |
| | FTH Rating - 0 Hr |




1.**FLOOR-CEILING ASSEMBLY --** THE 1 HR FIRE-RATED SOLID OR TRUSSED LUMBER JOIST FLOOR-CEILING ASSEMBLY SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER SPECIFIED IN THE INDIVIDUAL L500 SERIES FLOOR-CEILING DESIGNS IN THE UL FIRE RESISTANCE DIRECTORY. THE GENERAL CONSTRUCTION FEATURES OF THE FLOOR-CEILING ASSEMBLY ARE SUMMARIZED BELOW:

A. **FLOORING SYSTEM --** LUMBER OR PLYWOOD SUBFLOOR WITH FINISH FLOOR OF LUMBER, PLYWOOD OR **FLOOR TOPPING MIXTURE*** AS SPECIFIED IN THE INDIVIDUAL FLOOR-CEILING DESIGN. MAX DIAM OF OPENING SHALL BE 5-1/4 IN. (133 MM).

B. **WOOD JOIST* --** NOM 10 IN. (254 MM) DEEP (OR DEEPER) LUMBER, STEEL OR COMBINATION LUMBER AND STEEL JOISTS, TRUSSES OR **STRUCTURAL WOOD MEMBERS*** WITH BRIDGING AS REQUIRED AND WITH ENDS FIRESTOPPED.

C. **GYPSUM BOARD* --** NOM 4 FT (1.2 M) WIDE BY 5/8 IN. (16 MM) THICK AS SPECIFIED IN THE INDIVIDUAL FLOOR-CEILING DESIGN. MAX DIAM OF OPENING SHALL BE 5-1/4 IN. (133 MM).

1.1 **CHASE WALL --** (NOT SHOWN, OPTIONAL) THE THROUGH PENETRANTS (ITEM 2) MAY BE ROUTED THROUGH A 1 HR FIRE-RATED SINGLE, DOUBLE OR STAGGERED WOOD STUD/GYPSUM WALLBOARD CHASE WALL HAVING A FIRE RATING CONSISTENT WITH THAT OF THE FLOOR-CEILING ASSEMBLY. THE CHASE WALL SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER SPECIFIED IN THE INDIVIDUAL U300 SERIES WALL AND PARTITION DESIGNS IN THE UL FIRE RESISTANCE DIRECTORY AND SHALL INCLUDE THE FOLLOWING CONSTRUCTION FEATURES:

A. **STUDS --** NOM 2 BY 6 IN. (51 BY 152 MM) LUMBER OR DOUBLE NOM 2 BY 4 IN. (51 BY 102 MM) LUMBER STUDS.

B. **SOLE PLATE --** NOM 2 BY 6 IN. (51 BY 152 MM) LUMBER OR PARALLEL 2 BY 4 IN. (51 BY 102 MM) LUMBER PLATES, TIGHTLY BUTTED. MAX DIAM OF OPENING SHALL BE 5-1/4 IN.

C. **TOP PLATE --** THE DOUBLE TOP PLATE SHALL CONSIST OF TWO NOM 2 BY 6 IN. (51 BY 152 MM) LUMBER PLATES OR TWO SETS OF NOM 2 BY 4 IN. (51 BY 102 MM) LUMBER PLATES TIGHTLY BUTTED. MAX DIAM OF OPENING IS 5-1/4 IN. (133 MM).

D. **GYPSUM BOARD* --** THICKNESS, TYPE, NUMBER OF LAYERS AND FASTENERS SHALL BE AS SPECIFIED IN INDIVIDUAL WALL AND PARTITION DESIGN.

2.**STEEL DUCT --** NOM 4 IN. (102 MM) DIAM (OR SMALLER) NO. 28 GAUGE (OR HEAVIER) STEEL DUCT TO BE INSTALLED EITHER CONCENTRICALLY OR ECCENTRICALLY WITHIN THE FIRESTOP SYSTEM. THE ANNULAR SPACE BETWEEN DUCT AND PERIPHERY OF OPENING SHALL BE MIN OF 1/4 IN. (6 MM) TO MAX 3/4 IN. (19 MM). STEEL DUCT TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR-CEILING ASSEMBLY.

3.**FILL, VOID OR CAVITY MATERIALS*-SEALANT --** MIN 3/4 IN. (19 MM) THICKNESS OF SEALANT APPLIED WITHIN THE ANNULAR SPACE, FLUSH WITH TOP SURFACE OF FLOOR OR SOLE PLATE. MIN 5/8 IN. (16 MM) THICKNESS OF SEALANT APPLIED WITHIN ANNULAR SPACE, FLUSH WITH BOTTOM SURFACE OF GYPSUM BOARD OR LOWER TOP PLATE.

**HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC** -- FS-ONE SEALANT OR FS-ONE MAX INTUMESCENT SEALANT

*** INDICATES SUCH PRODUCTS SHALL BEAR THE UL OR CUL CERTIFICATION MARK FOR JURISDICTIONS EMPLOYING THE UL OR CUL CERTIFICATION (SUCH AS CANADA), RESPECTIVELY.**

LAST UPDATED ON 2015-01-20

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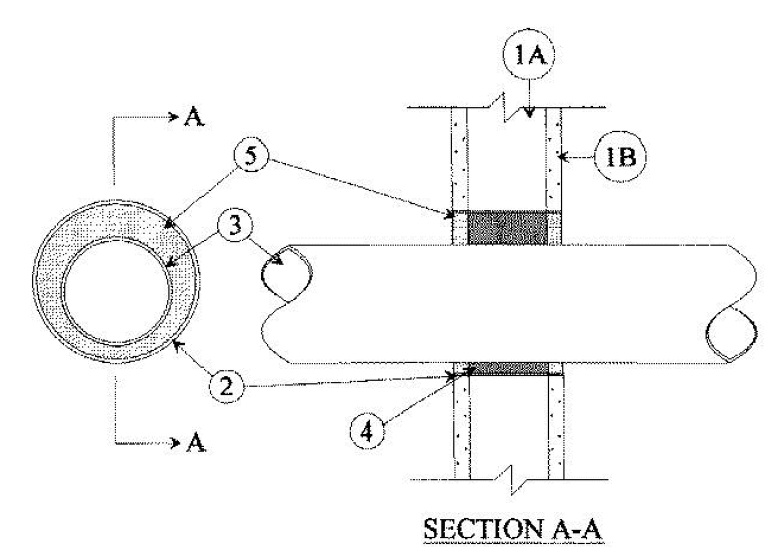
## FLOOR PENETRATION
## U.L. SYSTEM NO. F-C-7013

## System No. W-L-7017

January 26, 2015

| ANSI/UL1479 (ASTM E814) | CAN/ULC S115 |
|---|---|
| F Rating — 1 Hr | F Rating — 1 Hr |
| T Rating — 0 Hr | FT Rating — 0 Hr |
| | FH Rating — 1 Hr |
| | FTH Rating — 0 Hr |




1. **Wall Assembly --** The fire-rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner described in the individual U300, U400, V400 or W400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:

A. **Studs --** Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. (51 by 102 mm) lumber spaced 16 in. (406 mm) OC. Steel studs to be min 2-1/2 in. (64 mm) wide and spaced max 24 in. (610 mm) OC.

B. **Gypsum Board* --** One layer of nom 5/8 in. (16 mm) thick gypsum board, as specified in the individual Wall and Partition Design. Max diam of opening is 8-5/8 in. (219 mm).

2.**Metallic Sleeve --** Nom 8 in. (203 mm) diam (or smaller) Schedule 40 (or heavier) steel sleeve cast into wall assembly with joint compound and installed flush with wall surfaces.

3.**Air Duct --** Nom 6 in. (152 mm) diam (or smaller) prefabricated No. 28 MSG galv sheet metal duct. A min 1/2 in. (13 mm) to max 1-1/2 in. (38 mm) annular space is required within the firestop system. Duct to be rigidly supported on both sides of wall assembly.

4.**Forming Material* --** Foamed plastic forming material foamed into opening as a permanent form. Forming material to be recessed from both surfaces of wall as required to accommodate the required thickness of fill material.

**HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC** -- CF812 or CF-AS CJP Foam Sealant

5.**Fill, Void or Cavity Material* --** Min 5/8 in. (16 mm) thickness of fill material applied within annulus, flush with both surfaces of wall.

**HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC** -- FS-ONE Sealant or FS-ONE MAX Intumescent Sealant

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

Last Updated on 2015-01-26

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## WALL PENETRATION
## U.L. SYSTEM NO. W-L-7017

**KONTOGIANNIS & ASSOCIATES**

ARCHITECTURE
PLANNING
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43215-5492

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PROJECT:

TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

HVAC FIRE STOP SYSTEMS

DATE: 06/26/2026
REVISED:

GEORGE J. KONTOGIANNIS REGISTERED No. AR00034309 STATE OF INDIANA ARCHITECT

GEORGE J. KONTOGIANNIS, LICENSE #AR00034309
EXPIRATION DATE 12/31/2027

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- [ ] SUBMISSION SET 06/27/2025
- [ ] ZONING SET 05/07/2026
- [x] BID SET 06/26/2026
- [ ] PERMIT SET
- [ ] CONSTRUCTION SET

# H3-2

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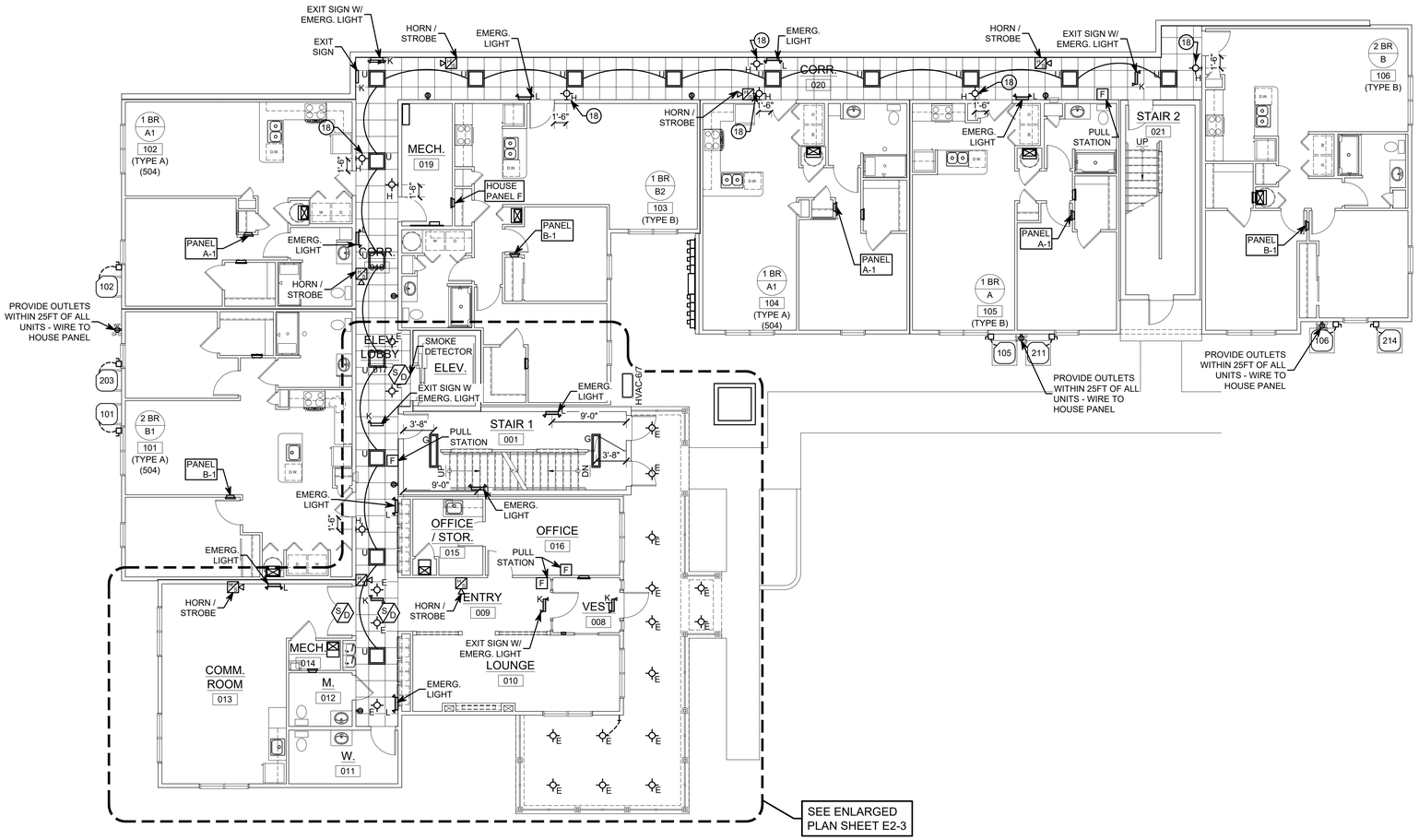
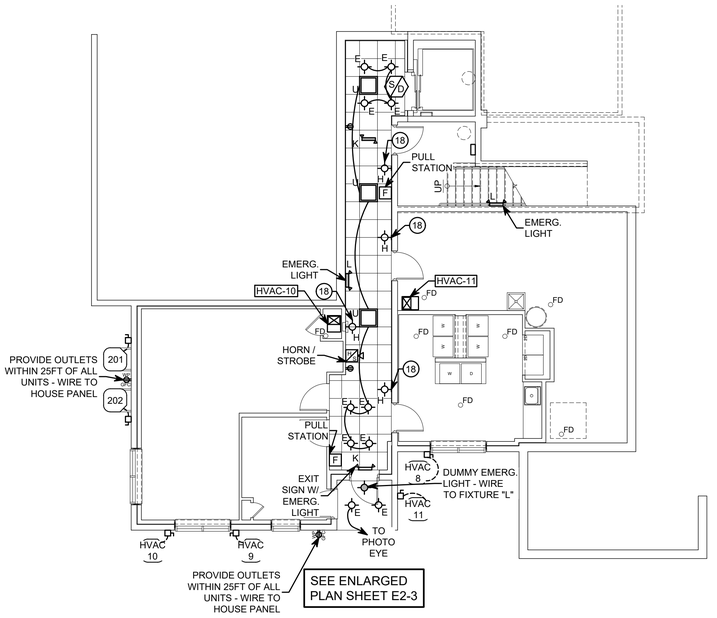



## FIRST FLOOR ELECTRICAL PLAN

SCALE: 1/8" = 1'-0"




## GROUND FLOOR ELECTRICAL PLAN

SCALE: 1/8" = 1'-0"

KONTOGIANNIS & ASSOCIATES
ARCHITECTURE
PLANNING
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PROJECT:
TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:
GROUND & FLOOR BUILDING ELECTRICAL PLANS

GEORGE J. KONTOGIANNIS REGISTERED No. AR00034309 STATE OF INDIANA ARCHITECT

DATE: 06/26/2026
REVISED:

GEORGE J. KONTOGIANNIS, LICENSE #AR00034309
EXPIRATION DATE 12/31/2027

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- ☐ ZONING SET 05/07/2026
- ■ BID SET 06/26/2026
- ☐ PERMIT SET
- ☐ CONSTRUCTION SET

E1-1

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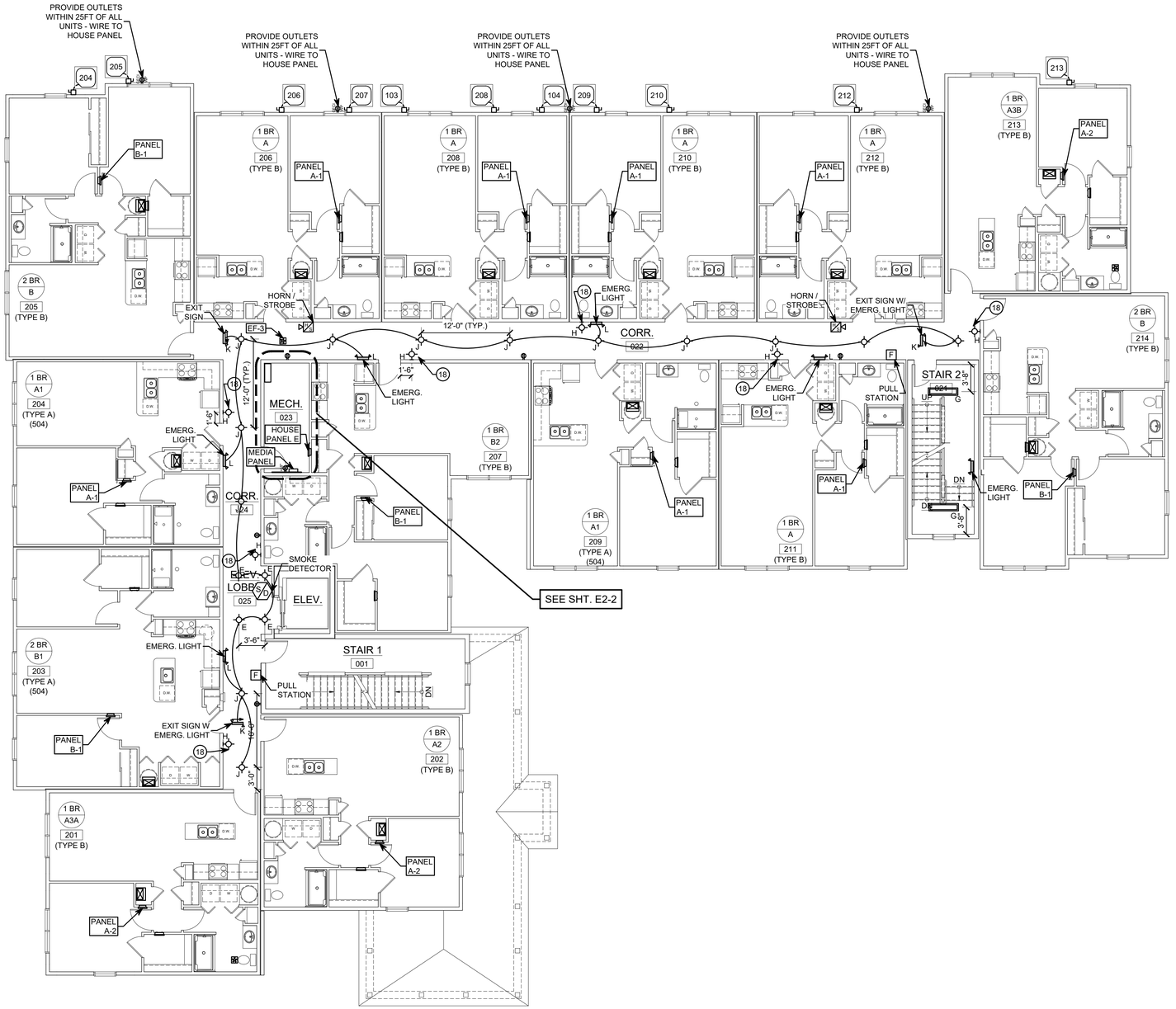


## SECOND FLOOR ELECTRICAL PLAN

SCALE: 1/8" = 1'-0"


**KONTOGIANNIS & ASSOCIATES**

ARCHITECTURE
PLANNING
DESIGN

400 SOUTH FIFTH ST
SUITE 400
COLUMBUS, OHIO
43215-5492

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E-MAIL: architects@kontogiannis.com


PROJECT:

# TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

SECOND FLOOR BUILDING ELECTRICAL PLAN

DATE: 06/26/2026
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E1-2


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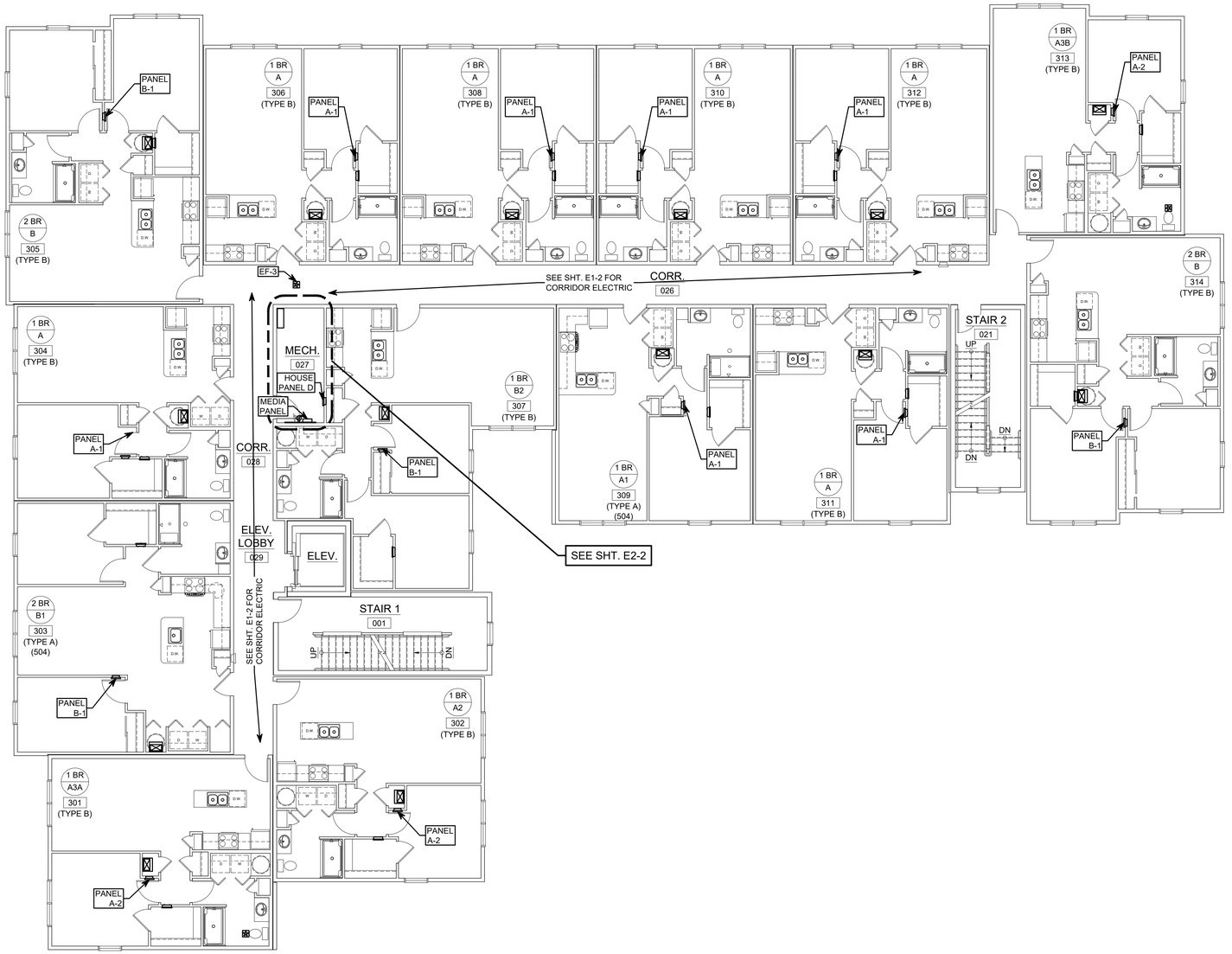


## THIRD FLOOR ELECTRICAL PLAN

SCALE: 1/8" = 1'-0"


**KONTOGIANNIS**
& ASSOCIATES

ARCHITECTURE
PLANNING
DESIGN

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PROJECT:

TANNER'S
CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

THIRD FLOOR
BUILDING
ELECTRICAL PLAN

DATE: 06/26/2026
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E1-3


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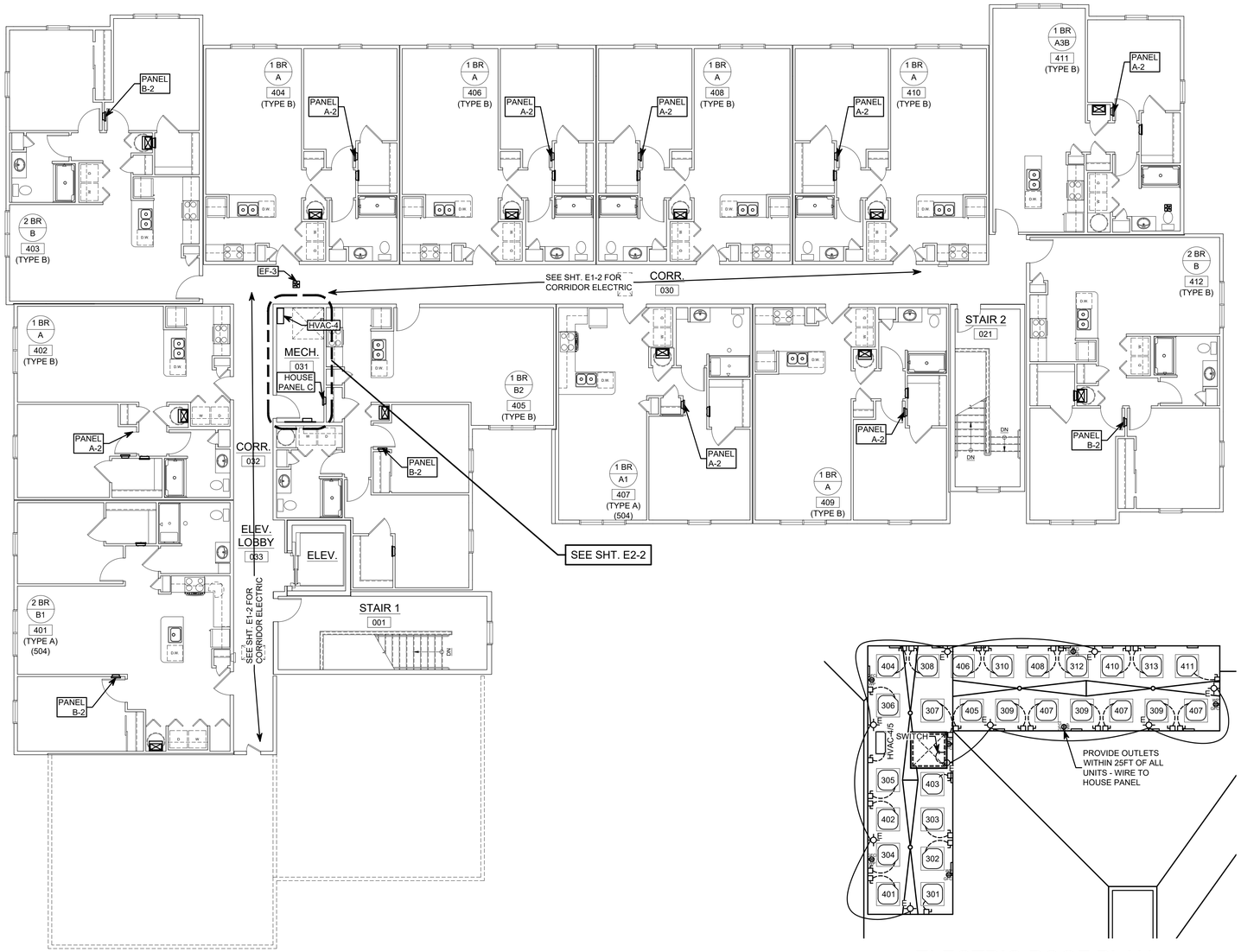


## FOURTH FLOOR ELECTRICAL PLAN

SCALE: 1/8" = 1'-0"




## ELECTRIC ROOF PLAN

SCALE: 1/8" = 1'-0"


**KONTOGIANNIS**
& ASSOCIATES

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PROJECT:

# TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

## FOURTH FLOOR BUILDING ELECTRICAL PLAN

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E1-4


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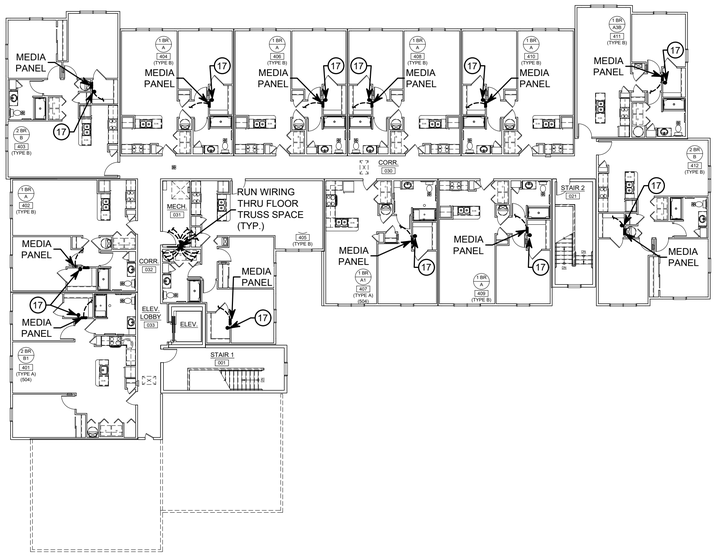
SEE E3-1 FOR SPECIAL OUTLETS LIST

GENERAL NOTES:

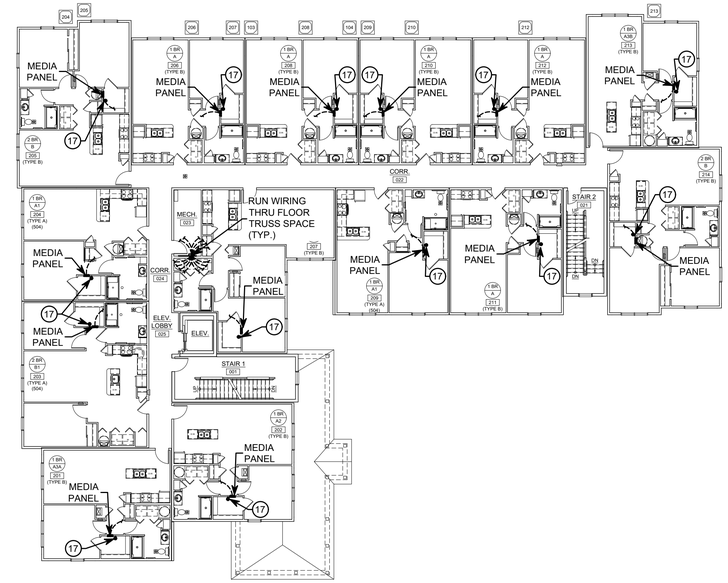
1. PROVIDE CABLE BOX BY DATACOMM MODEL# 45-8017-1 (OR REQ'D BY LOCAL CABLE CO.) & OUTLET (TYP.)
2. PROVIDE OUTLET WIRE IN W/ BEDROOM OUTLETS (TYP.)

ALL MEDIA PANELS TO HAVE OUTLET. VERIFY HEIGHT WITH SERVICE PROVIDER



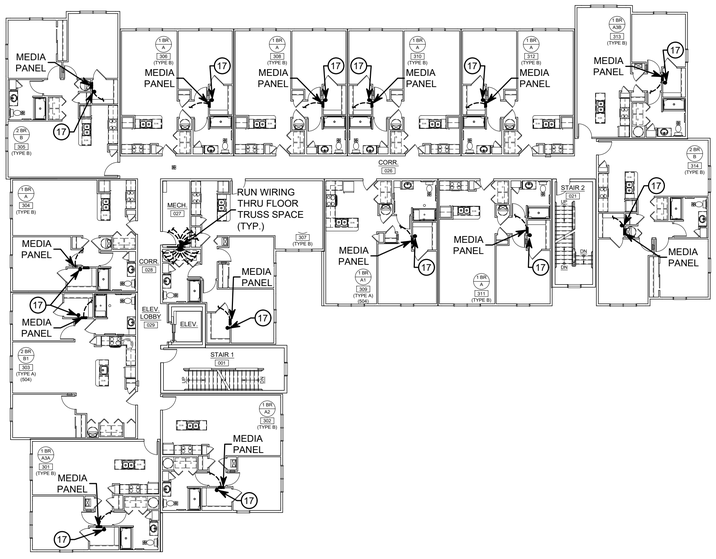

BUILDING 4TH FL. CABLING PLAN

SCALE: 1/16" = 1'-0"



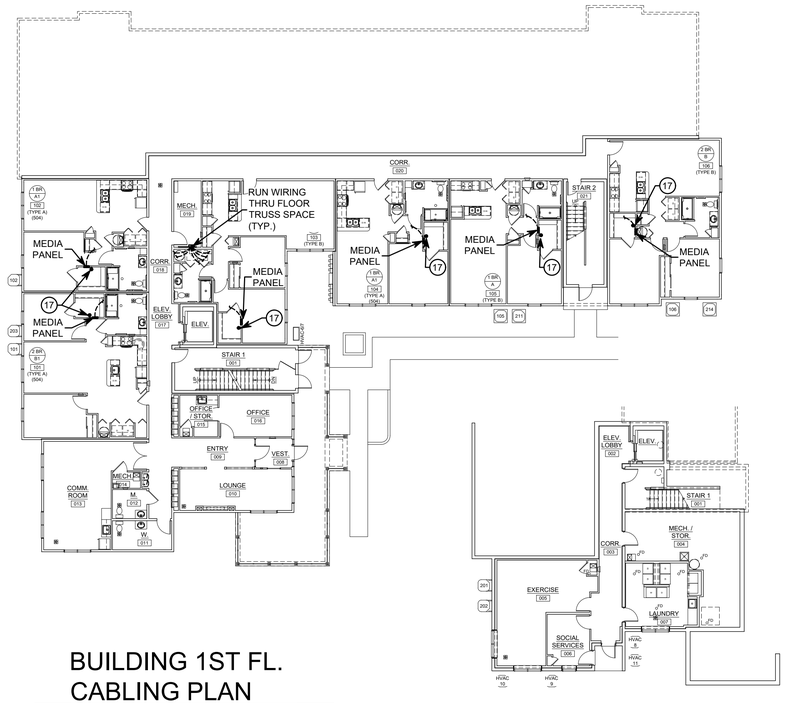

BUILDING 2ND FL. CABLING PLAN

SCALE: 1/16" = 1'-0"




BUILDING 3RD FL. CABLING PLAN

SCALE: 1/16" = 1'-0"




BUILDING 1ST FL. CABLING PLAN

SCALE: 1/16" = 1'-0"

BUILDING GROUND FL. CABLING PLAN

SCALE: 1/16" = 1'-0"


KONTOGIANNIS & ASSOCIATES

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58 DOUGHTY ROAD,
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BUILDING CABLING PLANS

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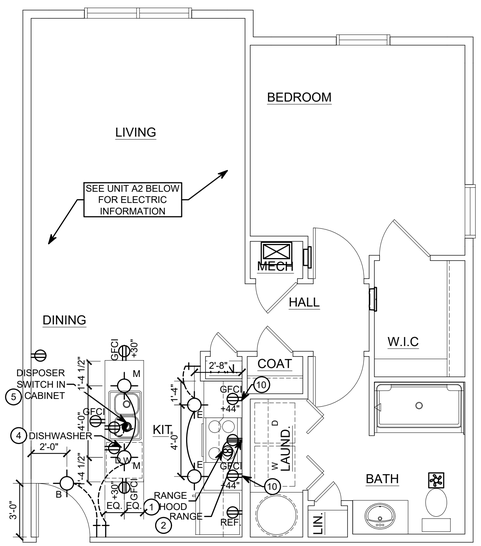
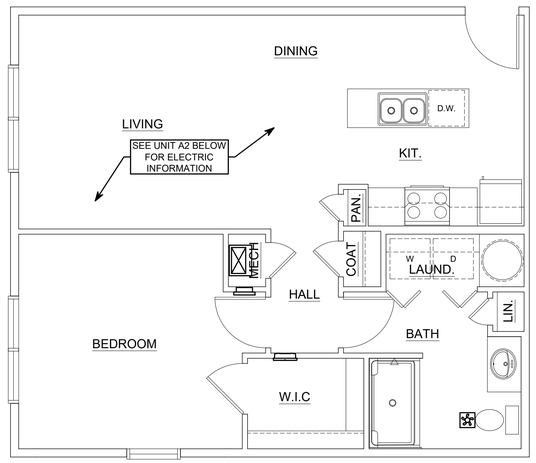


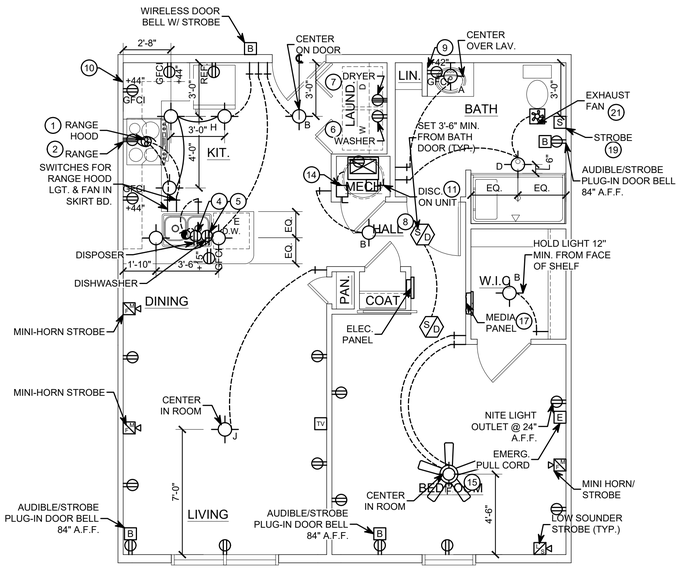

## ONE BEDROOM (TYPE B) UNIT A3B

SCALE: 1/4" = 1'-0"




## ONE BEDROOM (TYPE B) UNIT A3A

SCALE: 1/4" = 1'-0"

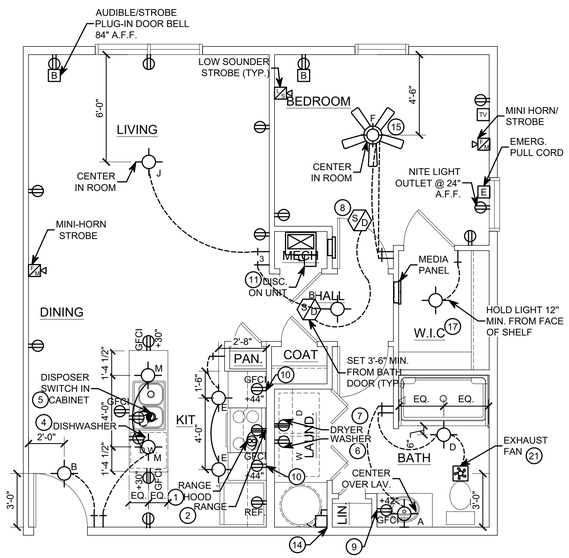



## ONE BEDROOM (TYPE A) (504) UNIT A1

SCALE: 1/4" = 1'-0"

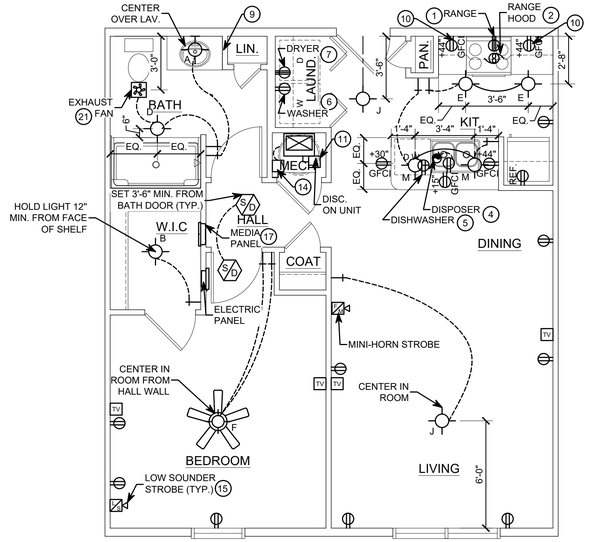
# SPECIAL OUTLETS

1. RANGE HOOD & MICROWAVE SHALL BE SUPPLIED BY THE GENERAL CONTRACTOR AND INSTALLED BY THE ELECTRICAL CONTRACTOR. PROVIDE ALL ELECTRICAL CONNECTIONS AND WIRE TO SEP. 15/1 CIRCUIT - USE #14 WIRE. PROVIDE OUTLET IN WALL CABINET.
2. ELECTRIC RANGE BY GENERAL CONTRACTOR. PROVIDE 40 AMP OUTLET, WIRE BACK TO 40/2 CIRCUIT BREAKER, USE #8 WIRE AND MAKE ALL CONNECTIONS. LOCATE OUTLET PER APPLIANCE MANUFACTURER'S RECOMMENDATIONS.
3. EXHAUST FANS SHALL BE PROVIDED AND INSTALLED BY THE HEATING CONTRACTOR. WIRE IN WITH LIGHTING CIRCUIT AS SHOWN AND MAKE ALL CONNECTIONS. PROVIDE OCCUPANCY SENSOR SWITCH IN LOCATIONS SHOWN.
4. DISPOSAL SHALL BE PROVIDED AND INSTALLED BY PLUMBING CONTRACTOR. UNIT HAS CORD W/ PLUG - INSTALL OUTLET UNDER SINK, WIRE SWITCH TO 15/1 CIRCUIT BREAKER, USE #14 WIRE AND MAKE ALL CONNECTIONS.
5. DISHWASHER BY GENERAL CONTRACTOR. PROVIDE OUTLET UNDER SINK & PIGTAIL CORD WITH PLUG LONG ENOUGH TO ALLOW DISHWASHER TO BE PULLED OUT. WIRE TO AFI/GFCI BREAKER.
6. WASHER BY GENERAL CONTRACTOR. PROVIDE WALL MOUNTED SINGLE OUTLET MOUNTED AT 42" A.F.F. WIRE BACK TO 20/1 CIRCUIT BREAKER, USE #12 WIRE AND MAKE ALL CONNECTIONS. (VERIFY IF WASHER BOX HAS AN OUTLET.)
7. DRYER BY GENERAL CONTRACTOR. PROVIDE WALL MOUNTED OUTLET AT 42" A.F.F. WIRE BACK TO 30/2 CIRCUIT BREAKER, USE #10 WIRE AND MAKE ALL CONNECTIONS.
8. HOUSEHOLD FIRE DETECTION CEILING MOUNTED AS SHOWN, SHALL BE INSTALLED IN ACCORDANCE WITH 2017 FIRE CODE AND NFPA 70 MANUAL. WIRE INTO BEDROOM LIGHTING CIRCUIT. INTERCONNECT DETECTOR SO THAT IF ONE DETECTOR ALARMS ALL DETECTORS ALARM (PROVIDE BATTERY BACKUP). PROVIDE STROBE UNIT IN (504) AND SENSORY UNITS. PER 2013 NFPA CODE 72, INSTALL AT 3'-6" MIN DISTANCE FROM BATHROOM DOOR , 3'-0" MIN DISTANCE FROM HVAC SUPPLY/RETURN REGISTER, AND 10'-0" FROM ANY FIXED COOKING APPLIANCE IN KITCHEN.
9. GROUND FAULT BATH RECEPTACLE (G.F.I.) ABOVE COUNTER AT 42" A.F.F. AS SHOWN. OUTLET IN SECOND BATH IS FED DOWNSTREAM THROUGH THIS DEVICE AS APPLICABLE. WIRE TO SEPARATE 20/1 CIRCUIT BREAKER USE #12 WIRE.
10. GROUND FAULT RECEPTACLE (G.F.I.) IN BACKSPLASH OR ON WALL. WIRE IN WITH APPLIANCE CIRCUITRY.
11. WALL MOUNTED ELECTRIC BLOWER COIL UNIT WITH ELECTRIC HEAT STRIP. UNIT SHALL HAVE A DISCONNECT PROVIDED ON THE UNIT. WIRE TO A CIRCUIT BREAKER AS SHOWN.
12. WEATHERPROOF OUTLET PROVIDE GFI OUTLET AND WIRE IN WITH ADJACENT OUTLETS, OR WIRE DOWNSTREAM OF BATH GFI OUTLET.
13. PAD MOUNTED HEAT PUMP CONDENSER. PROVIDE WALL MOUNTED DISCONNECT AND WIRE TO PANEL. PROVIDE WEATHERPROOF OUTLETS WITHIN 25 FEET OF CONDENSERS.
14. ELECTRIC WATER HEATER. UNIT HAS 4,500 WATT ELEMENT. PROVIDE WALL MTD. DISCONNECT PER CODE. WIRE TO 30/2 CIRCUIT BREAKER. USE #10 WIRE & MAKE ALL CONNECTIONS.
15. PROVIDE U/L LISTED FAN JUNCTION BOX SECURELY MOUNTED FOR ALL CEILING FANS. JUNCTION BOX SHALL BE U/L LISTED CEILING FAN BOX.
16. PROVIDE LOW SOUNDER UNIT WITH STROBE AT PILLOW LOCATION CONNECTED TO THE FIRE ALARM SYSTEM PER NFPA 72. PROVIDE STROBE IN BATH & LIVING ROOM OF 504 UNITS TIED TO FIRE ALARM.
17. PROVIDE PRE-WIRE & ROUGH-IN FOR CABLE / PHONE SYSTEM. PROVIDE A CABLE BOX (PER LOCAL CABLE PROVIDER) WITH A 120 VOLT OUTLET. WIRE UNIT OUTLETS TO CABLE BOX THEN HOME RUN TO CENTRAL LOCATION FOR CONNECTION TO CABLE. PRICE BOTH RG6 & CAT 6.
18. WALL SCONCES WIRE WALL SCONCES TOGETHER & RUN BACK TO A TIMER IN THE MECHANICAL ROOM TO ALLOW LIGHTS TO BE TURNED OFF AT NIGHT.
19. PROVIDE STROBE / AUDIBLE 120 VOLT DOOR BELL UNIT W/ WIRELESS BUTTON OUTSIDE UNIT ENTRY DOOR. PROVIDE OUTLET @ 7'-0" A.F.F. BACK-TO-BACK IN LIVING ROOM / BEDROOM. INSTALL PUSH BUTTON AT DOOR ENTRY. PROVIDE MODEL WC180 PLUG-IN UNIT IN LIVING ROOM & BEDROOM. TEST UNIT & SET FOR AUDIBLE & STROBE SIGNAL.
20. PROVIDE TWO-WAY COMMUNICATION EMERGENCY PHONE SYSTEM. PROVIDE A RECESSED CALL STATION AT THE ELEVATOR ON THE 2ND, 3RD, AND 4TH FLOORS. PROVIDE CENTRAL COMMAND CENTER ON THE FIRST FLOOR. SYSTEM SHALL HAVE CAPABILITY TO CALL OFFSITE IF COMMAND CENTER DOES NOT ANSWER SYSTEM SHALL BE COMPLIANT WITH IBC, NFFA 72, ICCA117.1 (2017) & ADAAG (2010)
21. BATH EXHAUST FAN. PROVIDE 120 VOLT POWER TO ALLOW FAN TO RUN CONTINUOUS AT SET LOW SPEED. WIRE IN WITH ADJACENT BATH TUB LIGHT SO THAT WHEN LIGHT IS TURNED ON THE FAN WALL RAMP UP TO A HIGHER CFM SETTING (60 CFM). WHEN LIGHT IS TURNED OFF THE FAN WILL RETURN TO THE CONTINUOUS LOWER CFM SETTING.




## ONE BEDROOM (TYPE B) UNIT A2

SCALE: 1/4" = 1'-0"




## ONE BEDROOM (TYPE B) UNIT A

SCALE: 1/4" = 1'-0"


KONTOGIANNIS & ASSOCIATES

ARCHITECTURE
PLANNING
DESIGN

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PROJECT:

TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

1/4" UNIT ELECTRICAL PLANS

DATE: 06/26/2026
REVISED:

GEORGE J. KONTOGIANNIS REGISTERED No. AR00034309 STATE OF INDIANA ARCHITECT

GEORGE J. KONTOGIANNIS, LICENSE #AR00034309
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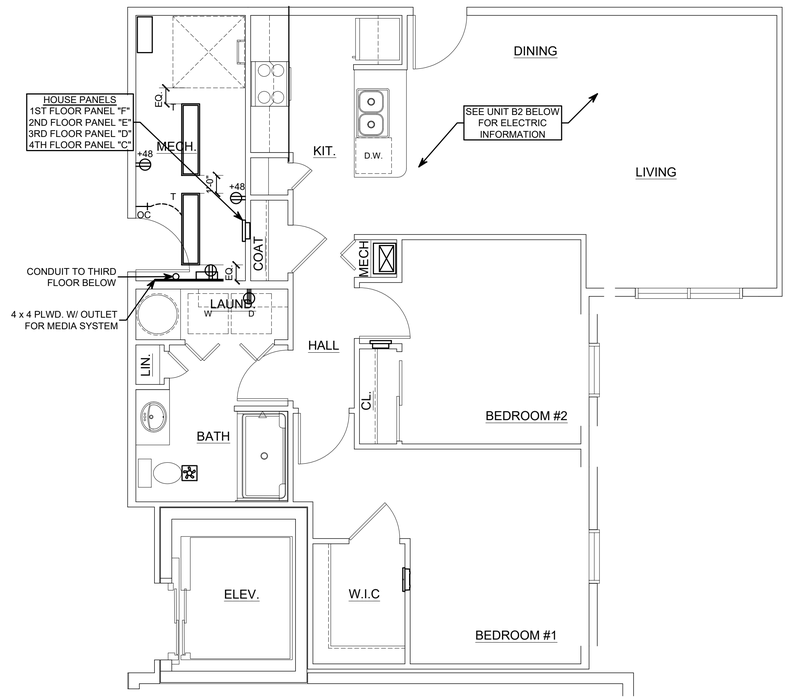


# FORTH FLOOR TWO BEDROOM (TYPE B) UNIT B2

SCALE: 1/4" = 1'-0"

## SPECIAL OUTLETS

1. RANGE HOOD & MICROWAVE SHALL BE SUPPLIED BY THE GENERAL CONTRACTOR AND INSTALLED BY THE ELECTRICAL CONTRACTOR. PROVIDE ALL ELECTRICAL CONNECTIONS AND WIRE TO SEP. 15/1 CIRCUIT - USE #14 WIRE. PROVIDE OUTLET IN WALL CABINET.
2. ELECTRIC RANGE BY GENERAL CONTRACTOR. PROVIDE 40 AMP OUTLET, WIRE BACK TO 40/2 CIRCUIT BREAKER, USE #8 WIRE AND MAKE ALL CONNECTIONS. LOCATE OUTLET PER APPLIANCE MANUFACTURER'S RECOMMENDATIONS.
3. EXHAUST FANS SHALL BE PROVIDED AND INSTALLED BY THE HEATING CONTRACTOR. WIRE IN WITH LIGHTING CIRCUIT AS SHOWN AND MAKE ALL CONNECTIONS. PROVIDE OCCUPANCY SENSOR SWITCH IN LOCATIONS SHOWN.
4. DISPOSAL SHALL BE PROVIDED AND INSTALLED BY PLUMBING CONTRACTOR. UNIT HAS CORD W/ PLUG - INSTALL OUTLET UNDER SINK, WIRE SWITCH TO 15/1 CIRCUIT BREAKER, USE #14 WIRE AND MAKE ALL CONNECTIONS.
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6. WASHER BY GENERAL CONTRACTOR. PROVIDE WALL MOUNTED SINGLE OUTLET MOUNTED AT 42" A.F.F. WIRE BACK TO 20/1 CIRCUIT BREAKER, USE #12 WIRE AND MAKE ALL CONNECTIONS. (VERIFY IF WASHER BOX HAS AN OUTLET.)
7. DRYER BY GENERAL CONTRACTOR. PROVIDE WALL MOUNTED OUTLET AT 42" A.F.F. WIRE BACK TO 30/2 CIRCUIT BREAKER, USE #10 WIRE AND MAKE ALL CONNECTIONS.
8. HOUSEHOLD FIRE DETECTION CEILING MOUNTED AS SHOWN, SHALL BE INSTALLED IN ACCORDANCE WITH 2017 FIRE CODE AND NFPA 70 MANUAL. WIRE INTO BEDROOM LIGHTING CIRCUIT. INTERCONNECT DETECTOR SO THAT IF ONE DETECTOR ALARMS ALL DETECTORS ALARM (PROVIDE BATTERY BACKUP). PROVIDE STROBE UNIT IN (504) AND SENSORY UNITS. PER 2013 NFPA CODE 72, INSTALL AT 3'-6" MIN DISTANCE FROM BATHROOM DOOR , 3'-0" MIN DISTANCE FROM HVAC SUPPLY/RETURN REGISTER, AND 10'-0" FROM ANY FIXED COOKING APPLIANCE IN KITCHEN.
9. GROUND FAULT BATH RECEPTACLE (G.F.I.) ABOVE COUNTER AT 42" A.F.F. AS SHOWN. OUTLET IN SECOND BATH IS FED DOWNSTREAM THROUGH THIS DEVICE AS APPLICABLE. WIRE TO SEPARATE 20/1 CIRCUIT BREAKER USE #12 WIRE.
10. GROUND FAULT RECEPTACLE (G.F.I.) IN BACKSPLASH OR ON WALL. WIRE IN WITH APPLIANCE CIRCUITRY.
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13. PAD MOUNTED HEAT PUMP CONDENSER. PROVIDE WALL MOUNTED DISCONNECT AND WIRE TO PANEL. PROVIDE WEATHERPROOF OUTLETS WITHIN 25 FEET OF CONDENSERS.
14. ELECTRIC WATER HEATER. UNIT HAS 4,500 WATT ELEMENT. PROVIDE WALL MTD. DISCONNECT PER CODE. WIRE TO 30/2 CIRCUIT BREAKER. USE #10 WIRE & MAKE ALL CONNECTIONS.
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18. WALL SCONCES WIRE WALL SCONCES TOGETHER & RUN BACK TO A TIMER IN THE MECHANICAL ROOM TO ALLOW LIGHTS TO BE TURNED OFF AT NIGHT.
19. PROVIDE STROBE / AUDIBLE 120 VOLT DOOR BELL UNIT W/ WIRELESS BUTTON OUTSIDE UNIT ENTRY DOOR. PROVIDE OUTLET @ 7'-0" A.F.F. BACK-TO-BACK IN LIVING ROOM / BEDROOM. INSTALL PUSH BUTTON AT DOOR ENTRY. PROVIDE MODEL WC180 PLUG-IN UNIT IN LIVING ROOM & BEDROOM. TEST UNIT & SET FOR AUDIBLE & STROBE SIGNAL.
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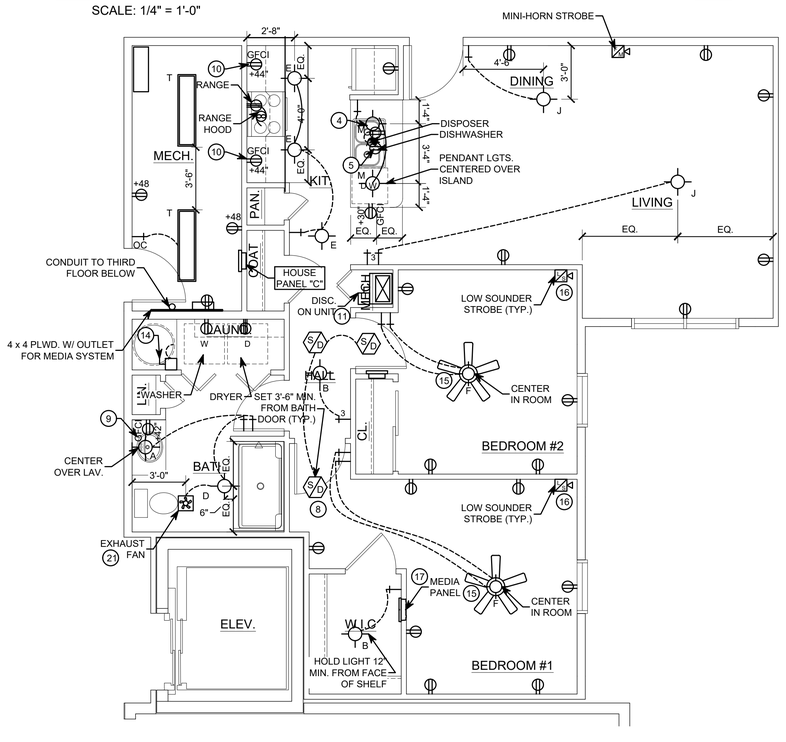
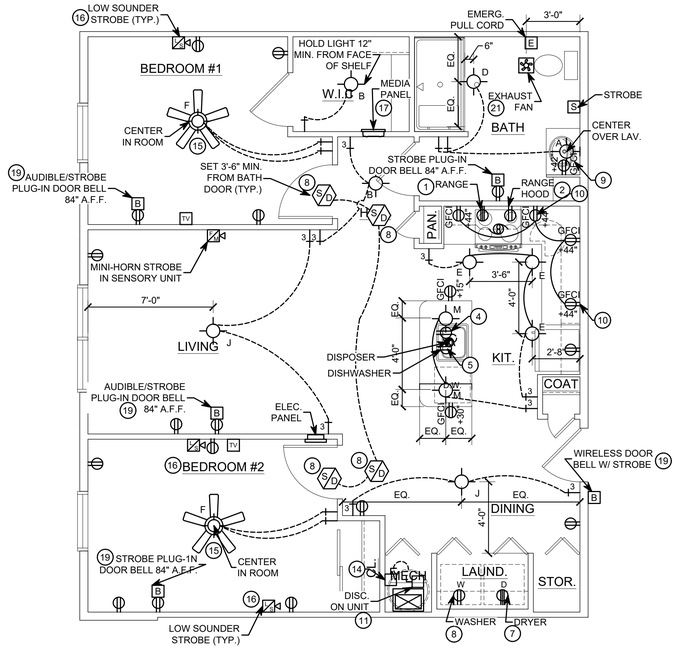


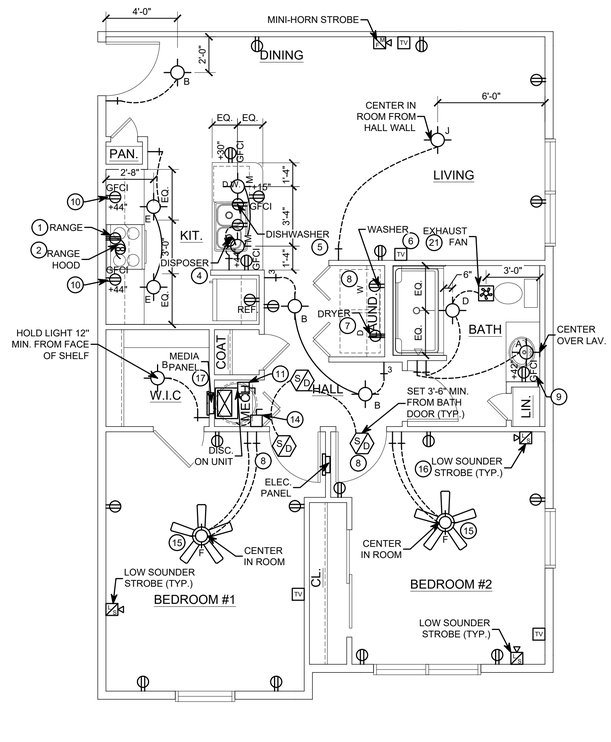

# TWO BEDROOM (TYPE B) UNIT B2

SCALE: 1/4" = 1'-0"




# TWO BEDROOM (TYPE A) (504) UNIT B1

SCALE: 1/4" = 1'-0"




# TWO BEDROOM (TYPE B) UNIT B

SCALE: 1/4" = 1'-0"


KONTOGIANNIS & ASSOCIATES

ARCHITECTURE
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DESIGN

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PROJECT:

TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

1/4" UNIT
ELECTRICAL PLANS

DATE: 06/26/2026
REVISED:

GEORGE J. KONTOGIANNIS REGISTERED No. AR00034309 STATE OF INDIANA ARCHITECT

GEORGE J. KONTOGIANNIS, LICENSE #AR00034309
EXPIRATION DATE 12/31/2027


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- ☐ ZONING SET 05/07/2026
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- ☐ CONSTRUCTION SET

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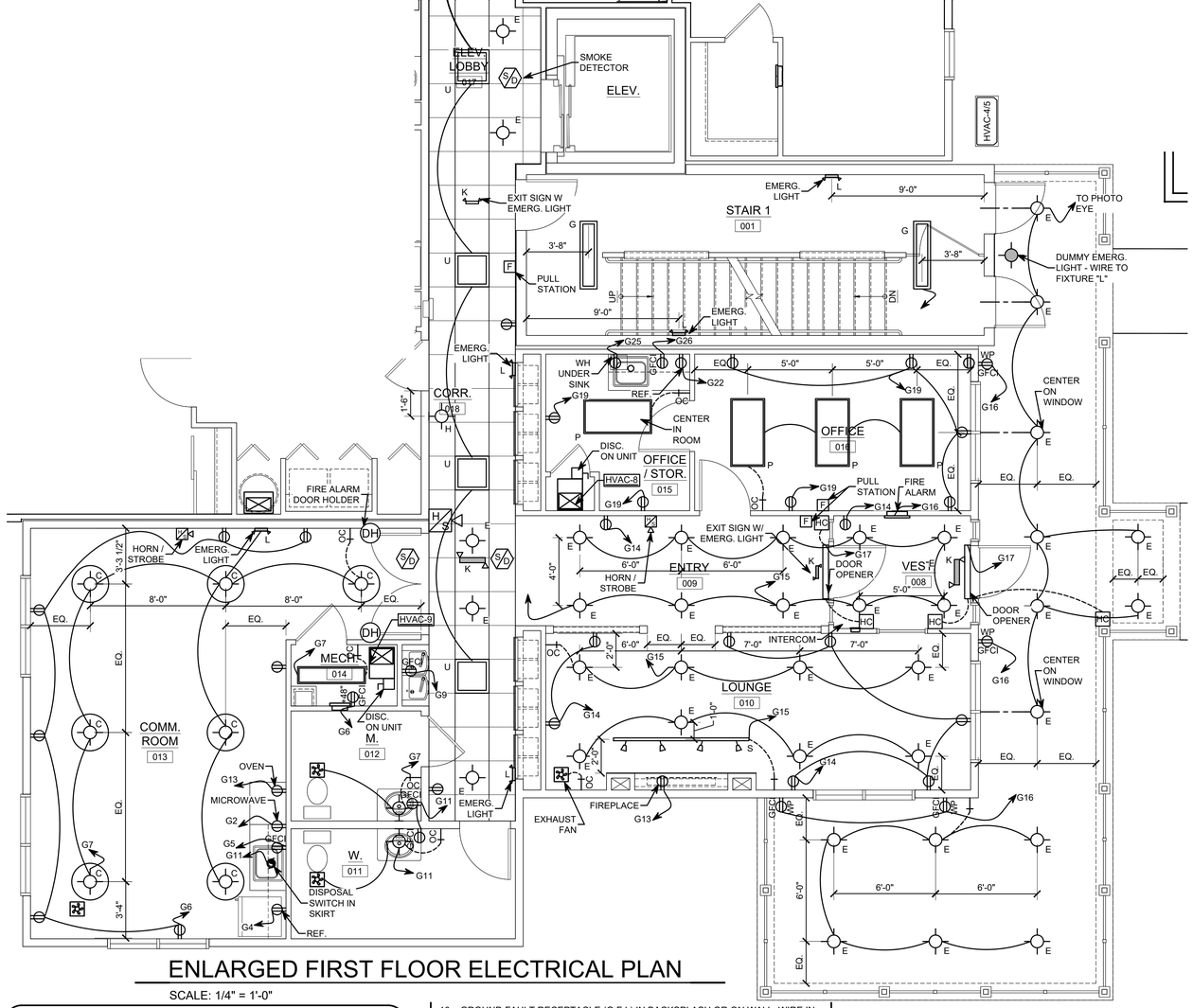
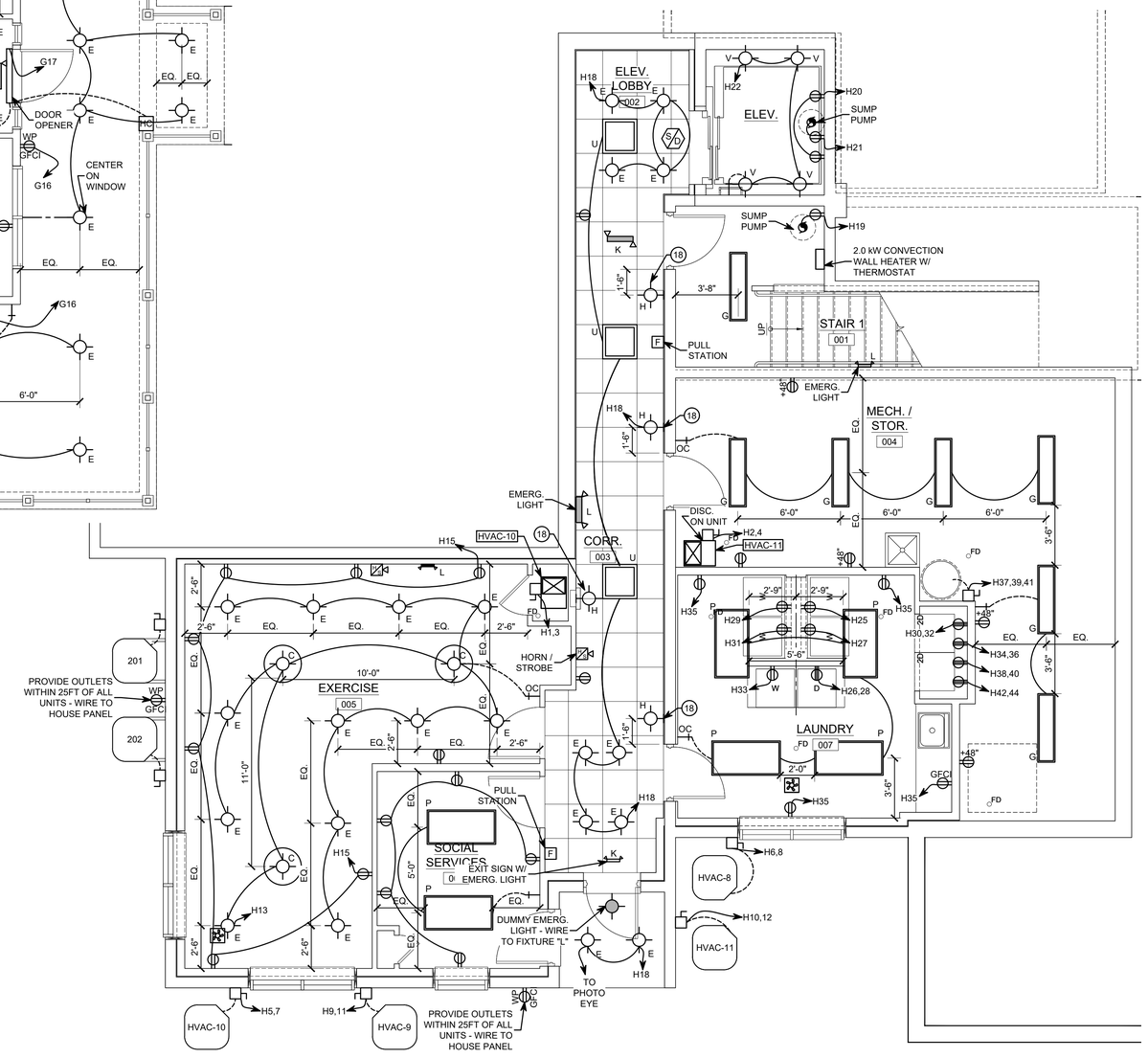



## ENLARGED FIRST FLOOR ELECTRICAL PLAN

SCALE: 1/4" = 1'-0"

## SPECIAL OUTLETS

1. RANGE HOOD & MICROWAVE SHALL BE SUPPLIED BY THE GENERAL CONTRACTOR AND INSTALLED BY THE ELECTRICAL CONTRACTOR. PROVIDE ALL ELECTRICAL CONNECTIONS AND WIRE TO SEP. 15/1 CIRCUIT - USE #14 WIRE. PROVIDE OUTLET IN WALL CABINET.
2. ELECTRIC RANGE BY GENERAL CONTRACTOR. PROVIDE 40 AMP OUTLET, WIRE BACK TO 40/2 CIRCUIT BREAKER, USE #8 WIRE AND MAKE ALL CONNECTIONS. LOCATE OUTLET PER APPLIANCE MANUFACTURER'S RECOMMENDATIONS.
3. EXHAUST FANS SHALL BE PROVIDED AND INSTALLED BY THE HEATING CONTRACTOR. WIRE IN WITH LIGHTING CIRCUIT AS SHOWN AND MAKE ALL CONNECTIONS. PROVIDE OCCUPANCY SENSOR SWITCH IN LOCATIONS SHOWN.
4. DISPOSAL SHALL BE PROVIDED AND INSTALLED BY PLUMBING CONTRACTOR. UNIT HAS CORD W/ PLUG - INSTALL OUTLET UNDER SINK, WIRE SWITCH TO 15/1 CIRCUIT BREAKER, USE #14 WIRE AND MAKE ALL CONNECTIONS.
5. DISHWASHER BY GENERAL CONTRACTOR. PROVIDE OUTLET UNDER SINK & PIGTAIL CORD WITH PLUG LONG ENOUGH TO ALLOW DISHWASHER TO BE PULLED OUT. WIRE TO AFI/GFCI BREAKER.
6. WASHER BY GENERAL CONTRACTOR. PROVIDE WALL MOUNTED SINGLE OUTLET MOUNTED AT 42" A.F.F. WIRE BACK TO 20/1 CIRCUIT BREAKER, USE #12 WIRE AND MAKE ALL CONNECTIONS. (VERIFY IF WASHER BOX HAS AN OUTLET.)
7. DRYER BY GENERAL CONTRACTOR. PROVIDE WALL MOUNTED OUTLET AT 42" A.F.F. WIRE BACK TO 30/2 CIRCUIT BREAKER, USE #10 WIRE AND MAKE ALL CONNECTIONS.
8. HOUSEHOLD FIRE DETECTION CEILING MOUNTED AS SHOWN, SHALL BE INSTALLED IN ACCORDANCE WITH 2017 FIRE CODE AND NFPA 70 MANUAL. WIRE INTO BEDROOM LIGHTING CIRCUIT. INTERCONNECT DETECTOR SO THAT IF ONE DETECTOR ALARMS ALL DETECTORS ALARM (PROVIDE BATTERY BACKUP). PROVIDE STROBE UNIT IN (504) AND SENSORY UNITS. PER 2013 NFPA CODE 72, INSTALL AT 3'-6" MIN DISTANCE FROM BATHROOM DOOR , 3'-0" MIN DISTANCE FROM HVAC SUPPLY/RETURN REGISTER, AND 10'-0" FROM ANY FIXED COOKING APPLIANCE IN KITCHEN.
9. GROUND FAULT BATH RECEPTACLE (G.F.I.) ABOVE COUNTER AT 42" A.F.F. AS SHOWN. OUTLET IN SECOND BATH IS FED DOWNSTREAM THROUGH THIS DEVICE AS APPLICABLE. WIRE TO SEPARATE 20/1 CIRCUIT BREAKER USE #12 WIRE.
10. GROUND FAULT RECEPTACLE (G.F.I.) IN BACKSPLASH OR ON WALL. WIRE IN WITH APPLIANCE CIRCUITRY.
11. WALL MOUNTED ELECTRIC BLOWER COIL UNIT WITH ELECTRIC HEAT STRIP. UNIT SHALL HAVE A DISCONNECT PROVIDED ON THE UNIT. WIRE TO A CIRCUIT BREAKER AS SHOWN.
12. WEATHERPROOF OUTLET PROVIDE GFI OUTLET AND WIRE IN WITH ADJACENT OUTLETS, OR WIRE DOWNSTREAM OF BATH GFI OUTLET.
13. PAD MOUNTED HEAT PUMP CONDENSER. PROVIDE WALL MOUNTED DISCONNECT AND WIRE TO PANEL. PROVIDE WEATHERPROOF OUTLETS WITHIN 25 FEET OF CONDENSERS.
14. ELECTRIC WATER HEATER. UNIT HAS 4,500 WATT ELEMENT. PROVIDE WALL MTD. DISCONNECT PER CODE. WIRE TO 30/2 CIRCUIT BREAKER. USE #10 WIRE & MAKE ALL CONNECTIONS.
15. PROVIDE U/L LISTED FAN JUNCTION BOX SECURELY MOUNTED FOR ALL CEILING FANS. JUNCTION BOX SHALL BE U/L LISTED CEILING FAN BOX.
16. PROVIDE LOW SOUNDER UNIT WITH STROBE AT PILLOW LOCATION CONNECTED TO THE FIRE ALARM SYSTEM PER NFPA 72. PROVIDE STROBE IN BATH & LIVING ROOM OF 504 UNITS TIED TO FIRE ALARM.
17. PROVIDE PRE-WIRE & ROUGH-IN FOR CABLE / PHONE SYSTEM. PROVIDE A CABLE BOX (PER LOCAL CABLE PROVIDER) WITH A 120 VOLT OUTLET. WIRE UNIT OUTLETS TO CABLE BOX THEN HOME RUN TO CENTRAL LOCATION FOR CONNECTION TO CABLE. PRICE BOTH RG6 & CAT 6.
18. WALL SCONCES WIRE WALL SCONCES TOGETHER & RUN BACK TO A TIMER IN THE MECHANICAL ROOM TO ALLOW LIGHTS TO BE TURNED OFF AT NIGHT.
19. PROVIDE STROBE / AUDIBLE 120 VOLT DOOR BELL UNIT W/ WIRELESS BUTTON OUTSIDE UNIT ENTRY DOOR. PROVIDE OUTLET @ 7'-0" A.F.F. BACK-TO-BACK IN LIVING ROOM / BEDROOM. INSTALL PUSH BUTTON AT DOOR ENTRY. PROVIDE MODEL WC180 PLUG-IN UNIT IN LIVING ROOM & BEDROOM. TEST UNIT & SET FOR AUDIBLE & STROBE SIGNAL.
20. PROVIDE TWO-WAY COMMUNICATION EMERGENCY PHONE SYSTEM. PROVIDE A RECESSED CALL STATION AT THE ELEVATOR ON THE 2ND, 3RD, AND 4TH FLOORS. PROVIDE CENTRAL COMMAND CENTER ON THE FIRST FLOOR. SYSTEM SHALL HAVE CAPABILITY TO CALL OFFSITE IF COMMAND CENTER DOES NOT ANSWER SYSTEM SHALL BE COMPLIANT WITH IBC, NFFA 72, ICCA117.1 (2017) & ADAAG (2010)
21. BATH EXHAUST FAN. PROVIDE 120 VOLT POWER TO ALLOW FAN TO RUN CONTINUOUS AT SET LOW SPEED. WIRE IN WITH ADJACENT BATH TUB LIGHT SO THAT WHEN LIGHT IS TURNED ON THE FAN WALL RAMP UP TO A HIGHER CFM SETTING (60 CFM), WHEN LIGHT IS TURNED OFF THE FAN WILL RETURN TO THE CONTINUOUS LOWER CFM SETTING.




## ENLARGED GROUND FLOOR ELECTRICAL PLAN

SCALE: 1/4" = 1'-0"


**KONTOGIANNIS & ASSOCIATES**

ARCHITECTURE
PLANNING
DESIGN

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PROJECT:

# TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
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# 3M™ Fire Barrier Sealant IC 15WB+

Product Data Sheet

FIRE BARRIER — UP TO 3 HOUR Fire Protection
SMOKE SEAL — L RATED Meets Optional L Requirements
SOUND BARRIER — STC 54 In STC 54-rated wall assembly
CLASSIFIED UL — FILL, VOID, OR CAVITY FOR USE IN JOINT SYSTEMS, THROUGH-PENETRATION FIRESTOP SYSTEMS AND PERIMETER CONTAINMENT SYSTEMS SEE UL FIRE RESISTANCE DIRECTORY 90G9
ULC LISTED — FILL, VOID OR CAVITY MATERIALS 90G9
LISTED Intertek — FIRESTOP SYSTEMS SEE INTERTEK DIRECTORY

## 1. Product Description

3M™ Fire Barrier Sealant IC 15WB+ is a cost-effective, one-part, gun-grade, latex-based, intumescent firestop sealant that dries to form a monolithic firestop seal that also acts as a barrier to airborne sound transmission. 3M™ Fire Barrier Sealant IC 15WB+ firestops through penetrations passing through fire-rated floor, floor/ceiling or wall assemblies, as well as other fire-rated interior building partitions and assemblies (e.g. static construction joints or blank openings). In addition, the unique intumescent property of this material allows 3M™ Fire Barrier Sealant IC 15WB+ to expand and help maintain a firestop penetration seal for up to 3 hours as penetrants are exposed to fire. 3M™ Fire Barrier Sealant IC 15WB+ bonds to most construction substrates, including: gypsum wallboard, concrete, metals, wood, plastic and cable jacketing. No mixing is required.

Cost-effective firestop sealant available in tube, pail or sausage.

Product Color: Yellow.

FBC SYSTEM COMPATIBLE

### Product Features

- Firestop tested up to 3 hours in accordance with ASTM E 814 (UL 1479), ASTM E 1966 (UL 2079) & CAN/ULC-S115
- Expanded fire protection systems
- Helps minimize sound transfer*
- Meets the standards and is deemed FBC™ System Compatible
- Sag-resistant
- Halogen-free
- Excellent adhesion
- Re-enterable/repairable
- Excellent caulk rate
- Paintable
- Water clean up

*Complies with the intent of LEED® NC-EQ Credit 4.1 for Low-Emitting Materials: Adhesives and Sealants, contains <250 g/L VOC contents (less $H_2O$ and exempt solvents per SCAQMD Rule 1168).*

**Minimizes noise transfer—STC-Rating of 54 when tested in STC 54-rated wall assembly.*

## 2. Applications

3M™ Fire Barrier Sealant IC 15WB+ is a general-purpose intumescent firestop ideal for sealing single or multiple through penetrations in fire-rated construction. 3M™ Fire Barrier Sealant IC 15WB+ is typically used in mechanical, electrical and plumbing applications to firestop openings created by the following penetrations in fire-rated floors, floor/ceilings or walls: metallic pipe, plastic pipe, conduit, power and communication cable, cable trays, busways, combos, insulated pipe and HVAC duct penetrations. 3M™ Fire Barrier Sealant IC 15WB+ is also used to firestop blank openings and static construction joints.

## 3. Specifications

3M™ Fire Barrier Sealant IC 15WB+ shall be a one component, ready-to-use, gun-grade, latex-based, intumescent firestop sealant capable of expanding a minimum of 3 times at 1000°F. The material shall be thixotropic and be applicable to overhead, vertical and horizontal firestops. The sealant shall be listed by independent test agencies such as UL, ULC, Intertek or FM. 3M™ Fire Barrier Sealant IC 15WB+ shall be tested to and pass the criteria of ASTM E 814 (UL 1479) Standard Test Method for Fire Tests of Penetration Firestop Systems, ASTM E 1966 (UL 2079) Standard Test Method for Fire Resistive Joint Systems and CAN/ULC-S115 Standard Method of Fire Tests of Firestop Systems. 3M™ Fire Barrier Sealant IC 15WB+ meets the requirements of the IBC, IRC, NBCC, IFC, IPC, IMC, NFPA 5000, NEC (NFPA 70) and NFPA 101.

**Typically Specified MasterFormat (2004)**
Section 07 84 00 – Firestopping

**Related Sections**
Section 07 27 00 – Air Barriers
Section 07 84 16 – Annular Space Protection
Section 07 84 43 – Fire-Resistant Joint Sealants
Section 07 86 00 – Smoke Seals
Section 07 87 00 – Smoke Containment Barriers
Section 07 92 13 – Elastomeric Joint Sealants
Section 07 92 19 – Acoustical Joint Sealants
Section 21 00 00 – Fire Suppression
Section 22 00 00 – Plumbing
Section 23 00 00 – Heating, Ventilating, and Air Conditioning (HVAC)
Section 26 00 00 – Electrical

For technical support relating to 3M Fire Protection Products and Systems, call: 1-800-328-1687
For more information on 3M Fire Protection Products, visit: www.3m.com/firestop

3M

## 4. Performance & Typical Physical Properties

| | |
|---|---|
| **Color:** | Yellow |
| **Application Temperature Range:** (ASTM C 1299) | 40° to 122°F (4° to 50°C) |
| **Service Temperature Range:** | -20° to 180°F (-28° to 82°C) |
| **STC Acoustic Barrier:** (ASTM E 90 and ASTM E 413) | 54 when tested in STC 54 rated wall assembly |
| **Surface Burning** (ASTM E 84): | Flame Spread 5, Smoke Development 50 |
| **Hardness** (ASTM D 2240 Shore A): | 70 |
| **Tensile Strength:** | 85 psi (0.59 MPa) |
| **Volume Shrinkage** (ASTM C 1241): | 28% |
| **VOC Less $H_2O$ and Exempt Solvents:** | <2 g/L |

**Dry:** Under typical conditions of 75°F (23°C) and 50% R.H., sealant becomes tack-free in about ten minutes and dry-to-touch in 30 to 60 minutes. Full dry depends upon ambient conditions and volume of sealant. Typical dry rate is approximately 1/8 inch (3 mm) per day.

Unit Volume: 10.1 fl. oz tube (298.7 ml, 18.2 in.$^3$), 20 fl. oz. sausage (591.5 ml, 36.1 in.$^3$), 27 fl. oz tube (798.5 ml, 48.7 in.$^3$), 4.5 gal. pail (17.03 L, 1039.5 in.$^3$)

## 5. Packaging, Storage, Shelf Life

**Packaging** — Product packaged in cartridge or pail is enclosed in HDPE plastic containers, sausage is packaged in aluminum foil wrap.

**Storage** — 3M™ Fire Barrier Sealant IC 15WB+ should be stored indoors in dry conditions between 40°F and 90°F (4°C and 32°C) in the original unopened package. Avoid repeated freeze / thaw exposures of the 3M™ Fire Barrier Sealant IC 15WB+ prior to installation.

**Shelf Life** — 3M™ Fire Barrier Sealant IC 15WB+ shelf life is 12 months in original unopened containers from date of packaging when stored above 68°F (2°C).

Lot numbering (e.g. 8183AS): First digit = Last digit of year manufactured, Second to fourth digit = Julian Date, Letters = Random to distinguish between lot numbers

## 6. Installation Techniques

*Consult a 3M Authorized Fire Protection Products Distributor / Dealer or Sales Representative for applicable UL, cUL, ULC, Intertek, FM or other third-party drawings and system details.*

**Preparatory Work** — The surface of the opening and any penetrating items should be cleaned to allow for the proper adhesion of the 3M™ Fire Barrier Sealant IC 15WB+. Ensure that the surface of the substrates are not wet and are frost free. Sealant can be installed with a standard caulking gun, pneumatic pumping equipment or it can be easily applied with a putty knife or trowel.

**Installation Details** — Install the applicable depth of backing material, if required, as detailed within the applicable UL, cUL, ULC, Intertek, FM or other third-party listed system. Cut the end of the 3M™ Fire Barrier Sealant IC 15WB+ tube spout to achieve the desired bead width when applying. Install the applicable depth of 3M™ Fire Barrier Sealant IC 15WB+ into the opening flush with the surface of the substrate, or as detailed within the applicable listed system, at the depth for the assembly and rating that is required. Tool within 5 minutes. Clean all tools immediately after use with water.

**Limitations** — Do not apply 3M™ Fire Barrier Sealant IC 15WB+ when surrounding temperature is than less 40°F (4°C) and in conditions where seals may be exposed to rain or water spray within 18 hours of application. Do not apply 3M™ Fire Barrier Sealant IC 15WB+ to building materials that bleed oil, plasticizers or solvent (e.g. impregnated wood, oil-based sealants, or green or partially vulcanized rubber). Do not apply 3M™ Fire Barrier Sealant IC 15WB+ to wet or frost-coated surfaces or to areas that are continuously damp or immersed in water.

## 7. Maintenance

No maintenance is expected to be required when installed in accordance with the applicable UL, cUL, ULC, Intertek, FM or other third-party listed system. Once installed, if any section of the 3M™ Fire Barrier Sealant IC 15WB+ is damaged, the following procedure will apply: remove and reinstall the damaged section in accordance with the applicable listed system, with a minimum 1/2 in. (12.7 mm) overlap onto the adjacent material.

## 8. Availability

3M™ Fire Barrier Sealant IC 15WB+ is available from 3M Authorized Fire Protection Products Distributors and Dealers. 3M™ Fire Barrier Sealant IC 15WB+ is available in 10.1 fl. oz. cartridges (3M ID 98-0400-5509-1, 12/case), 20.0 fl. oz. sausages (3M ID 98-0400-5512-5, 10/case), and 4.5 gallon pails (3M ID 98-0400-5510-9, 1/case). For additional technical and purchasing information regarding this and other 3M Fire Protection Products, please call: 1-800-328-1687 or visit www.3m.com/firestop.

## 9. Safe Handling Information

*Consult country-of-use Safety Data Sheet (SDS) prior to handling and disposal.*

**ImportaInt Notice to User:**
**Technical Information:** The technical information, recommendations and other statements contained in this document are based upon tests or experience that 3M believes are reliable, but the accuracy or completeness of such information is not guaranteed.
**Product Use:** Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. Given the variety of factors that can affect the use and performance of a 3M product, user is solely responsible for evaluating the 3M product and determining whether it is fit for a particular purpose and suitable for user's method of application.
**Warranty and Limited Remedy:** 3M warrants that each 3M Fire Protection Product will be free from defects in material and manufacture for 90 days from the date of purchase from 3M's authorized distributor. 3M MAKES NO OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. If a 3M product does not conform to this warranty, the sole and exclusive remedy is, at 3M's option, replacement of the 3M product or refund of the purchase price.
**Limitation of Liability:** Except where prohibited by law, 3M will not be liable for any loss or damage arising from the 3M product, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted.

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www.3M.com/firestop

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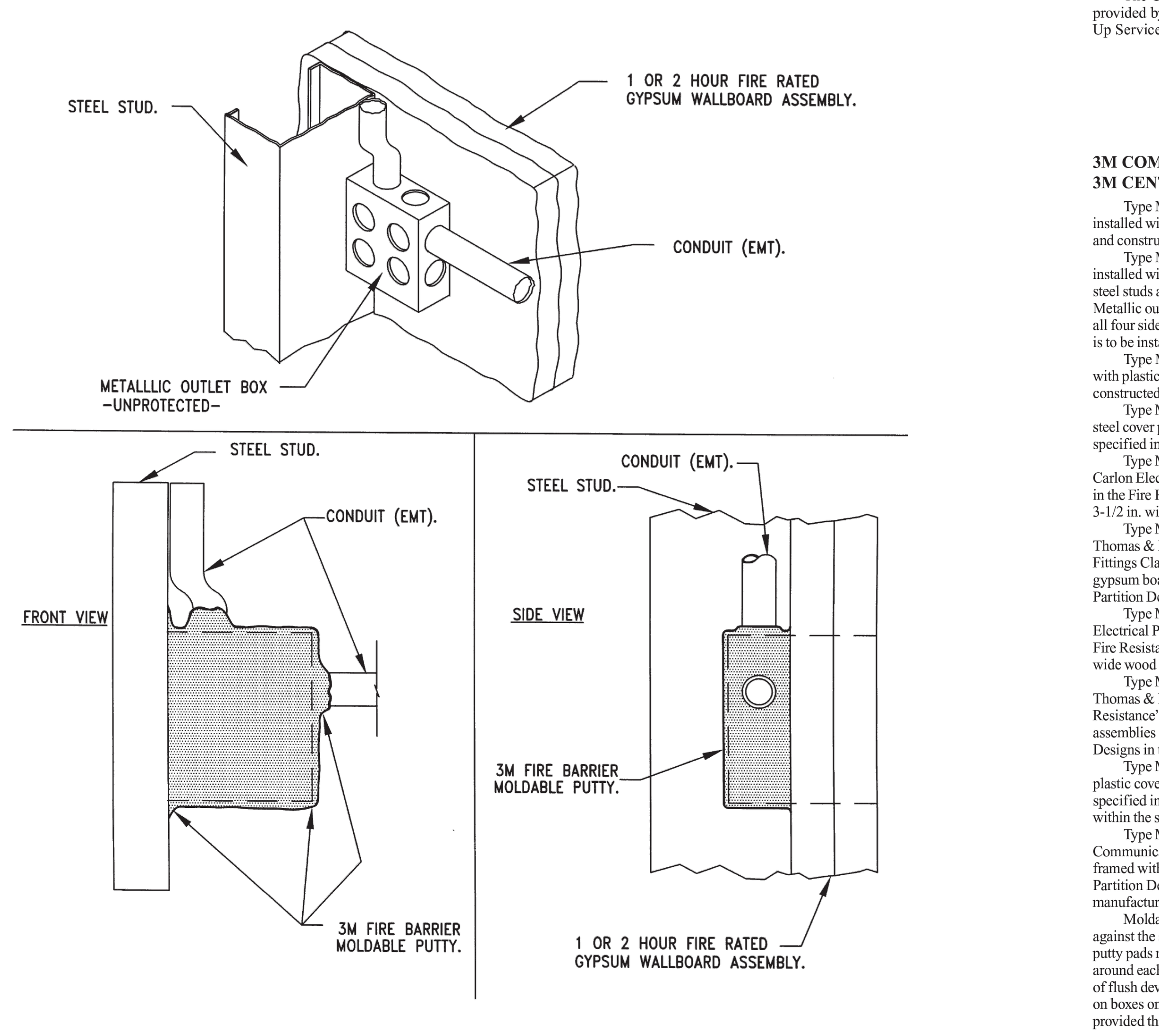
# Suggested Installation for 3M™ Fire Barrier Moldable Putty+ on Electrical Outlet Boxes




This material was extracted and drawn by 3M Fire Protection Products from the 2007 edition of the UL Fire Resistance Directory.



## WALL OPENING PROTECTIVE MATERIALS (CLIV)

This category covers proprietary compositions which are used to maintain the hourly ratings of fire resistive walls and partitions containing flush mounted devices such as outlet boxes, electrical cabinets and mechanical cabinets. The individual Classifications indicate the specific applications and the method of installation for which the materials have been evaluated.

The basic standard used to investigate products in this category is ANSI/UL 263, "Fire Tests of Building Construction and Materials".

**LOOK FOR CLASSIFICATION MARKING ON PRODUCT**

The Classification Marking of Underwriters Laboratories Inc. (shown below) on the product or container is the only method provided by Underwriters Laboratories Inc. to identify Wall Opening Protective Materials produced under its Classification and Follow-Up Service.

**UNDERWRITERS LABORATORIES INC.®**
**CLASSIFIED**
**WALL OPENING PROTECTIVE MATERIAL**
**FIRE RESISTANCE CLASSIFICATION**
**SEE PRODUCT CATEGORY IN UL FIRE RESISTANCE DIRECTORY**

**3M COMPANY 3M FIRE PROTECTION PRODUCTS** **R9700**
**3M CENTER, ST PAUL MN 55144 USA**

Type MPP+ moldable putty pads for use with max 4-11/16 by 4-11/16 by 2-1/8 in. deep flush device UL Listed Metallic Outlet Boxes installed with steel cover plates for use in 1 or 2 hr fire rated gypsum board wall assemblies framed with min 3-1/2 in. wide wood or steel studs and constructed as specified in the individual U300, U400 or V400 Series Wall and Partition Designs in the Fire Resistance Directory.

Type MPP+ moldable putty pads for use with max 4-11/16 by 4-11/16 by 2 1/8 in. deep flush device UL Listed Metallic Outlet Boxes installed with steel or plastic cover plates for use in 1 hr or 2 hr fire rated gypsum board wall assemblies framed with min 5-1/2 in. wide wood or steel studs and constructed as specified in the individual U300, U400 or V400 Series Wall and Partition Designs in the Fire Resistance Directory. Metallic outlet boxes to be provided with steel attachment brackets which offset box min 1/4 in. from stud. Putty pad to be affixed to the back and all four sides of the box. Boxes may be installed back-to-back within the stud cavity. When back-to-back boxes are interconnected, a ball of putty is to be installed to plug the open end of each electrical metallic tube or conduit within the outlet boxes.

Type MPP+ moldable putty pads for use with max 4 by 4 by 2-1/8 in. deep flush device UL Listed Metallic Outlet Boxes installed with plastic cover plates for use in 1 or 2 hr fire rated gypsum board wall assemblies framed with min 3-1/2 in. wide wood or steel studs and constructed as specified in the individual U300, U400 or V400 Series Wall and Partition Designs in the Fire Resistance Directory.

Type MPP+ moldable putty pads for use with max 14 by 4 by 2-1/2 in. deep flush device UL Listed Metallic Outlet Boxes installed with steel cover plates for use in 1 or 2 hr fire rated gypsum board wall assemblies framed with min 3-1/2 in. wide steel studs and constructed as specified in the individual U400 or V400 Series Wall and Partition Designs in the fire Resistance Directory.

Type MPP+ moldable putty pads for use with max 14 by 4-1/2 by 2-1/2 in. deep UL Listed Nonmetallic Outlet Boxes manufactured by Carlon Electrical Products, made of PVC and bearing a 2 hr rating under the "Outlet Boxes and Fittings Classified for Fire Resistance" category in the Fire Resistance Directory. Boxes installed with steel cover plates, for use in 1 or 2 hr rated gypsum board wall assemblies framed with min 3-1/2 in. wide wood studs and constructed as specified in the individual U300 Series Wall and Partition Designs in the Fire Resistance Directory.

Type MPP+ moldable putty pads for use with max 4 by 3-1/4 by 3-3/4 in. deep UL Listed Nonmetallic Outlet Boxes manufactured by Thomas & Betts Corp., made of polycarbonate, Type 234 or made of phenolic, Type 1052 and bearing a 2 hr rating under the "Outlet Boxes and Fittings Classified for Fire Resistance" category in the Fire Resistance Directory. Boxes installed with steel cover plates. For use in 1 hr fire rated gypsum board wall assemblies framed with min 3-1/2 in. wide wood studs and constructed as specified in the individual U300 series Wall and Partition Designs in the Fire Resistance Directory.

Type MPP+ moldable putty pads for use with max 4 by 3-3/4 by 3 in. deep UL Listed Nonmetallic Outlet Boxes manufactured by Carlon Electrical Products, made of PVC and bearing a 2 hr rating under the "Outlet Boxes and Fittings Classified for Fire Resistance category in the Fire Resistance Directory. Boxes installed with plastic cover plates, for use in 1 hr rated gypsum board wall assemblies framed with min 3-1/2 in. wide wood studs and constructed as specified in the individual U300 Series Wall and Partition Designs in the Fire Resistance Directory.

Type MPP+ moldable putty pads for use with max 4 by 3-1/4 by 3-3/4 in. deep UL Listed Nonmetallic Outlet Boxes manufactured by Thomas & Betts Corp., made of phenolic, Type 2002-738-C and bearing a 2 hr rating under the "Outlet Boxes and Fittings Classified for Fire Resistance" category in the Fire Resistance Directory. Boxes installed with steel cover plates. For use in 2 hr fire rated gypsum board wall assemblies framed with min 3-1/2 in. wide steel studs and constructed as specified in the individual U400 or V400 Series Wall and Partition Designs in the Fire Resistance Directory.

Type MPP+ moldable putty pads for use with max 4 by 4 by 1-1/2 in. deep flush device UL Listed Metallic Outlet Boxes installed with plastic cover plates for use in 1 hr fire rated gypsum board wall assemblies framed with min 3-5/8 in. wide steel studs and constructed as specified in the individual U400 or V400 Series Wall and Partition Designs in the Fire Resistance Directory. Boxes may be installed back-to-back within the stud cavity.

Type MPP+ moldable putty pads for use with max 5 by 5 by 2 7/8 in. deep flush device UL Listed Metallic Outlet Boxes or UL Listed Communications-Circuit Accessories manufactured by Randl Industries Inc for use in 1 hr or 2 hr fire rated gypsum board wall assemblies framed with min 3-5/8 in. wide wood or steel studs and constructed as specified in the individual U300, U400 or V400 Series Wall and Partition Designs in the Fire Resistance Directory. Metallic outlet boxes to be provided with UL Listed Signal Appliance with steel cover plate manufactured by Cooper Wheelock Inc.

Moldable putty pads are to be installed to completely cover the exterior surfaces of the outlet box (except for the side of the outlet box against the stud unless otherwise noted) including nailing tabs and to completely seal against the stud within the stud cavity. Multiple moldable putty pads may be installed on an outlet box to attain the required minimum thickness of putty material. Additional putty material used to seal around each conduit and/or cable fitting on the exterior of each box. A min 1/10 in. thickness of putty material is required on the exterior surfaces of flush device boxes in 1 and 2 hr fire rated Wall and Partition Designs. When the moldable putty pad outlet box protective material is used on boxes on both sides of wall as directed, the horizontal separation between outlet boxes on opposite sides of the wall may be less than 24 in. provided that the outlet boxes are not installed back to back, except as noted.

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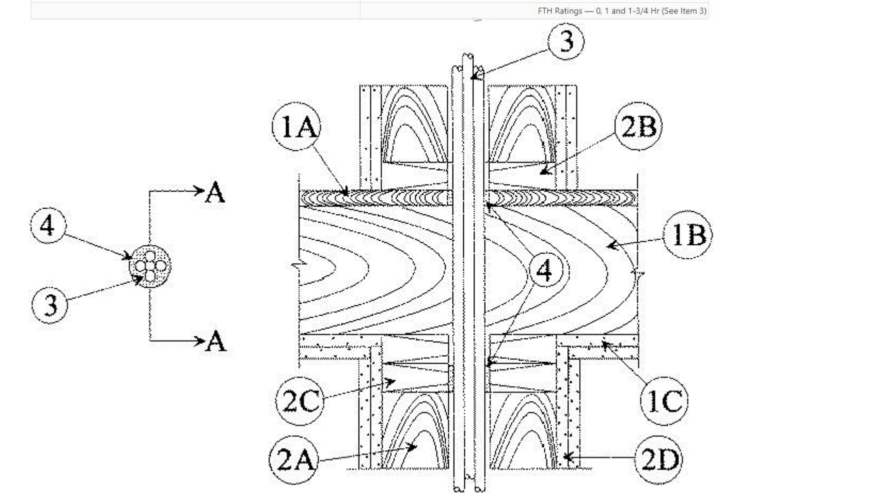
## SYSTEM NO. F-C-3012

APRIL 06, 2018
**F RATINGS -- 1 AND 2 HR (SEE ITEM 1)**
**T RATINGS -- 0, 1 AND 3/4 HR (SEE ITEM 3)**

| ANSI/UL1479 (ASTM E814) | CAN/ULC S115 |
|---|---|
| F Ratings — 1 and 2 Hr (See Item 1) | F Ratings — 1 and 2 Hr (See Item 1) |
| T Ratings — 0, 1 and 1-3/4 Hr (See Item 3) | FT Ratings — 0, 1 and 1-3/4 Hr (See Item 3) |
| | FH Ratings — 1 and 2 Hr (See Item 1) |
| | FTH Ratings — 0, 1 and 1-3/4 Hr (See Item 3) |




SECTION A-A

1.**FLOOR-CEILING ASSEMBLY --** THE 1 OR 2 HR FIRE-RATED SOLID OR TRUSSED LUMBER JOIST FLOOR-CEILING ASSEMBLY SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER SPECIFIED IN THE INDIVIDUAL L500 SERIES FLOOR-CEILING DESIGNS IN THE UL FIRE RESISTANCE DIRECTORY. THE GENERAL CONSTRUCTION FEATURES OF THE FLOOR-CEILING ASSEMBLY ARE SUMMARIZED BELOW:

A. **FLOORING SYSTEM --** LUMBER OR PLYWOOD SUBFLOOR WITH FINISH FLOOR OF LUMBER, PLYWOOD OR **FLOOR TOPPING MIXTURE*** AS SPECIFIED IN THE INDIVIDUAL FLOOR-CEILING DESIGN. MAX DIAM OF OPENING FOR 1 OR 2 HR ASSEMBLY IS 2-1/2 IN. (64 MM) OR 2 IN. (51 MM), RESPECTIVELY.

B. **WOOD JOISTS* --** NOM 10 IN. (254 MM) DEEP (OR DEEPER) LUMBER, STEEL OR COMBINATION LUMBER AND STEEL JOISTS, TRUSSES OR **STRUCTURAL WOOD MEMBERS*** WITH BRIDGING AS REQUIRED AND WITH ENDS FIRESTOPPED.

C. **FURRING CHANNELS --** (NOT SHOWN) -- (AS REQUIRED) - RESILIENT GALVANIZED STEEL FURRING INSTALLED IN ACCORDANCE WITH THE MANNER SPECIFIED IN THE INDIVIDUAL L500 SERIES DESIGNS IN THE FIRE RESISTANCE DIRECTORY.

D. **GYPSUM BOARD* --** THICKNESS, TYPE, NUMBER OF LAYERS AND FASTENERS SHALL BE AS SPECIFIED IN THE INDIVIDUAL FLOOR-CEILING DESIGN. MAX DIAM OF OPENING FOR 1 OR 2 HR ASSEMBLY IS 2-1/2 IN. (64 MM) OR 2 IN. (51 MM), RESPECTIVELY.

THE F RATING OF THE FIRESTOP SYSTEM IS EQUAL TO THE RATING OF THE FLOOR-CEILING ASSEMBLY.

2.**CHASE WALL --** (OPTIONAL) - THE THROUGH PENETRANT (ITEM 3) MAY BE ROUTED THROUGH A FIRE-RATED OR NON-RATED SINGLE, DOUBLE OR STAGGERED WOOD STUD/GYPSUM WALLBOARD CHASE WALL. THE CHASE WALL SHALL BE CONSTRUCTED TO INCLUDE THE FOLLOWING CONSTRUCTION FEATURES:

A. **STUDS --** NOM 2 BY 6 IN. (51 BY 152 MM) OR DOUBLE NOM 2 BY 4 IN. (51 BY 102 MM) LUMBER STUDS.

B. **SOLE PLATE --** NOM 2 BY 6 IN. (51 BY 152 MM) OR PARALLEL 2 BY 4 IN. (51 BY 102 MM) LUMBER PLATES, TIGHTLY BUTTED. MAX DIAM OF OPENING FOR 1 OR 2 HR RATED ASSEMBLY IS 2-1/2 IN. (64 MM) OR 2 IN. (51 MM), RESPECTIVELY.

C. **TOP PLATE --** THE DOUBLE TOP PLATE SHALL CONSIST OF TWO NOM 2 BY 6 IN. (51 BY 152 MM) OR TWO SETS OF PARALLEL 2 BY 4 IN. (51 BY 102 MM) LUMBER PLATES, TIGHTLY BUTTED. MAX DIAM OF OPENING FOR 1 OR 2 HR RATED ASSEMBLY IS 2-1/2 IN. (64 MM) OR 2 IN. (51 MM), RESPECTIVELY.

D. **GYPSUM BOARD* --** ONE OR TWO LAYERS OF MIN 1/2 IN. (13 MM) GYPSUM BOARD.

3.**CABLES --** IN 1 HR FIRE-RATED ASSEMBLIES, AGGREGATE CROSS-SECTIONAL AREA OF CABLES IN OPENING TO BE MAX 45 PERCENT OF THE CROSS-SECTIONAL AREA OF THE OPENING (MAX 2 IN. (51 MM) DIAM BUNDLE). CABLES TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR ASSEMBLY. ANY COMBINATION OF THE FOLLOWING TYPES AND SIZES OF COPPER CONDUCTORS MAY BE USED:

A. RG 59 COAXIAL CABLE WITH SINGLE COPPER CONDUCTOR, CELLULAR POLYETHYLENE CELLULAR FOAM INSULATION AND POLYVINYL CHLORIDE (PVC) JACKET.
B. MAX 8/C NO. 22 AWG TELEPHONE CABLE WITH POLYVINYL CHLORIDE (PVC) JACKETING.
C. MAX 2/C NO. 12 AWG CABLE WITH POLYVINYL CHLORIDE (PVC) INSULATION AND JACKETING.
D. MAX 3/C WITH GROUND NO. 2/0 AWG ALUMINUM OR COPPER TYPE SER CABLE WITH POLYVINYL CHLORIDE (PVC) INSULATION.
E. MAX 3/C WITH GROUND NO. 2/0 AWG TYPE NM CABLE WITH POLYVINYL CHLORIDE (PVC) INSULATION.
F. MAX 3/C NO. 12 AWG MC (BX) CABLE WITH POLYVINYL CHLORIDE (PVC) INSULATION.
G. MAX 1 IN. DIAM METAL CLAD TEK CABLE WITH PVC JACKET.
H. MAX 4/C WITH GROUND NO. 300 KCMIL (OR SMALLER) ALUMINUM SER CABLE WITH PVC INSULATION AND JACKET.
I. **THROUGH PENETRATING PRODUCT*** - ANY CABLES, **METAL-CLAD CABLE+** OR **ARMORED CABLE+** CURRENTLY CLASSIFIED UNDER THE **THROUGH PENETRATING PRODUCTS** CATEGORY.

SEE **THROUGH PENETRATING PRODUCT** (XHLY) CATEGORY IN THE FIRE RESISTANCE DIRECTORY FOR NAMES OF MANUFACTURERS.

**THE T RATING IS 1 AND 1-3/4 HR FOR 1 AND 2 HR RATED ASSEMBLIES, RESPECTIVELY, FOR CABLES 3A THROUGH 3G. THE T RATING IS 0 HR FOR CABLES 3H AND 3I.**

4.**FILL, VOID OR CAVITY MATERIAL* -- SEALANT --** MIN 3/4 IN. (19 MM) THICKNESS OF FILL MATERIAL APPLIED WITHIN THE ANNULUS, FLUSH WITH TOP SURFACE OF FLOOR OR SOLE PLATE. MIN 5/8 IN. (16 MM) THICKNESS OF FILL MATERIAL ALSO APPLIED WITHIN THE ANNULUS, FLUSH WITH BOTTOM SURFACE OF CEILING OR LOWER TOP PLATE.

**HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC** -- FS611A SEALANT OR FS-ONE SEALANT OR FS-ONE MAX INTUMESCENT SEALANT

*** INDICATES SUCH PRODUCTS SHALL BEAR THE UL OR CUL CERTIFICATION MARK FOR JURISDICTIONS EMPLOYING THE UL OR CUL CERTIFICATION (SUCH AS CANADA), RESPECTIVELY.**

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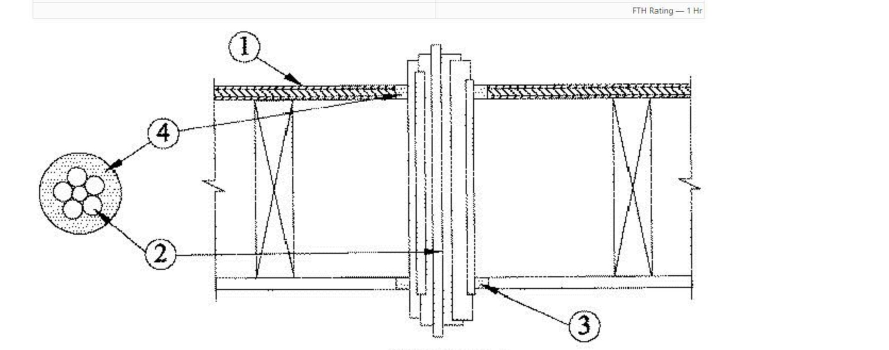
### FLOOR PENETRATION
### U.L. SYSTEM NO. F-C-3012

## SYSTEM NO. F-C-3044

JANUARY 20, 2015
**F RATINGS -- 1 HR**
**T RATINGS -- 1 HR**

| ANSI/UL1479 (ASTM E814) | CAN/ULC S115 |
|---|---|
| F Rating — 1 Hr | F Rating — 1 Hr |
| T Rating — 1 Hr | FT Rating — 1 Hr |
| | FH Rating — 1 Hr |
| | FTH Rating — 1 Hr |




SECTION A-A

1.**FLOOR-CEILING ASSEMBLY --** THE 1 HR FIRE-RATED SOLID OR TRUSSED LUMBER JOIST FLOOR-CEILING ASSEMBLY SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER SPECIFIED IN THE INDIVIDUAL L500 SERIES FLOOR-CEILING DESIGNS IN THE UL FIRE RESISTANCE DIRECTORY. THE GENERAL CONSTRUCTION FEATURES OF THE FLOOR-CEILING ASSEMBLY ARE SUMMARIZED BELOW:

A. **FLOORING SYSTEM --** LUMBER OR PLYWOOD SUBFLOOR WITH FINISH FLOOR OF LUMBER, PLYWOOD OR **FLOOR TOPPING MIXTURE*** AS SPECIFIED IN THE INDIVIDUAL FLOOR-CEILING DESIGN. MAX DIAM OF OPENING SHALL BE 3 IN. (76 MM).

B. **WOOD JOISTS* --** NOM 10 IN. (254 MM) DEEP (OR DEEPER) LUMBER, STEEL OR COMBINATION LUMBER AND STEEL JOISTS, TRUSSES OR **STRUCTURAL WOOD MEMBERS*** WITH BRIDGING AS REQUIRED AND WITH ENDS FIRESTOPPED.

C. **GYPSUM BOARD* --** NOM 4 FT (1.2 M) WIDE BY 5/8 IN. (16 MM) THICK AS SPECIFIED IN THE INDIVIDUAL FLOOR-CEILING DESIGN. MAX DIAM OF OPENING SHALL BE 3 IN. (76 MM).

1.1 **CHASE WALL --** (NOT SHOWN, OPTIONAL)--THE THROUGH PENETRANTS (ITEM 2) MAY BE ROUTED THROUGH A 1 HR FIRE-RATED SINGLE, DOUBLE OR STAGGERED WOOD STUD/GYPSUM WALLBOARD CHASE WALL HAVING A FIRE RATING CONSISTENT WITH THAT OF THE FLOOR-CEILING ASSEMBLY. THE CHASE WALL SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER SPECIFIED IN THE INDIVIDUAL U300 SERIES WALL AND PARTITION DESIGNS IN THE UL FIRE RESISTANCE DIRECTORY AND SHALL INCLUDE THE FOLLOWING CONSTRUCTION FEATURES:

A. **STUDS --** NOM 2 BY 4 IN. (51 BY 102 MM) LUMBER STUDS.
B. **SOLE PLATE --** NOM 2 BY 4 IN. (51 BY 102 MM) LUMBER PLATES. MAX DIAM OF OPENING SHALL BE 3 IN. (76 MM).
C. **TOP PLATE --** THE DOUBLE TOP PLATE SHALL CONSIST OF TWO NOM 2 BY 4 IN. (51 BY 102 MM) LUMBER PLATES. MAX DIAM OF OPENING SHALL BE 3 IN. (76 MM).
D. **GYPSUM BOARD* --** THICKNESS, TYPE, NUMBER OF LAYERS AND FASTENERS SHALL BE AS SPECIFIED IN INDIVIDUAL WALL AND PARTITION DESIGN.

2.**CABLES --** AGGREGATE CROSS-SECTIONAL AREA OF CABLES IN OPENING TO BE MAX 25 PERCENT OF THE CROSS-SECTIONAL AREA OF THE OPENING. THE ANNULAR SPACE WITHIN THE FIRESTOP SYSTEM SHALL BE 3/4 IN. CABLES TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR ASSEMBLY. ANY COMBINATION OF THE FOLLOWING TYPES AND SIZES OF CABLES MAY BE USED:

A. RG 59 COAXIAL CABLE WITH SINGLE COPPER CONDUCTOR, CELLULAR POLYETHYLENE CELLULAR FOAM INSULATION AND POLYVINYL CHLORIDE (PVC) JACKET.
B. MAX 25 PAIR NO. 24 AWG TELEPHONE CABLE WITH POLYVINYL CHLORIDE (PVC) JACKETING.
C. MAX 3/C NO. 10 AWG CABLE (TYPE NM).
D. MAX 3/C WITH GROUND NO. 2/0 AWG ALUMINUM OR COPPER TYPE SER CABLE WITH POLYVINYL CHLORIDE (PVC) INSULATION.
E. MAX 24 FIBER OPTIC CABLE.
F. **THROUGH PENETRATING PRODUCTS* --** THREE CONDUCTOR NO. 10 AWG **METAL-CLAD CABLE.**

**AFC CABLE SYSTEMS INC**

3.**FILL, VOID OR CAVITY MATERIALS*-SEALANT --** MIN 3/4 IN. (19 MM) THICKNESS OF SEALANT APPLIED WITHIN THE ANNULAR SPACE, FLUSH WITH TOP SURFACE OF FLOOR OR SOLE PLATE. MIN 5/8 IN. (16 MM) THICKNESS OF SEALANT APPLIED WITHIN ANNULAR SPACE, FLUSH WITH BOTTOM SURFACE OF THE GYPSUM WALLBOARD OR LOWER TOP PLATE. SEALANT FORCED INTO THE INTERSTICES OF THE CABLES ON BOTH SIDES OF THE WALL.

**HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC** -- FS-ONE SEALANT OR FS-ONE MAX INTUMESCENT SEALANT

*** INDICATES SUCH PRODUCTS SHALL BEAR THE UL OR CUL CERTIFICATION MARK FOR JURISDICTIONS EMPLOYING THE UE OR CUL CERTIFICATION (SUCH AS CANADA), RESPECTIVELY.**+BEARING THE UL LISTING MARK

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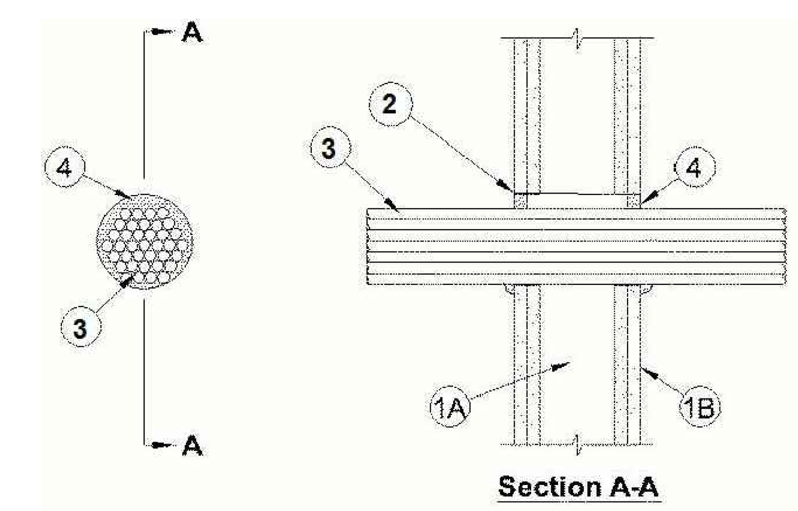
### FLOOR PENETRATION
### U.L. SYSTEM NO. F-C-3044

## SYSTEM NO. W-L-3195

APRIL 10, 2018
**F RATINGS -- 1 AND 2 HR (SEE ITEM 1)**
**T RATINGS -- 0 AND 1/2 HR (SEE ITEM 1)**




1. **WALL ASSEMBLY --** THE 1 OR 2 HR FIRE RATED GYPSUM BOARD/STUD WALL ASSEMBLY SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER DESCRIBED IN THE INDIVIDUAL U300, U400 OR V400 SERIES WALL AND PARTITION DESIGN IN THE UL FIRE RESISTANCE DIRECTORY AND SHALL INCLUDE THE FOLLOWING CONSTRUCTION FEATURES:

A. **STUDS --** WALL FRAMING MAY CONSIST OF EITHER WOOD STUDS OR STEEL CHANNEL STUDS. WOOD STUDS TO CONSIST OF NOM 2 BY 4 IN. (51 BY 102 MM) LUMBER SPACED 16 IN. (406 MM) OC. STEEL STUDS TO BE MIN 3-1/2 IN. (89 MM) WIDE SPACED MAX 24 IN. (610 MM) OC.

B. **GYPSUM BOARD* --** THE GYPSUM BOARD TYPE, THICKNESS, NUMBER OF LAYERS, FASTENER TYPE AND SHEET ORIENTATION SHALL BE AS SPECIFIED IN THE INDIVIDUAL DESIGN IN THE UL FIRE RESISTANCE DIRECTORY. MAX DIAM OF OPENING IS 5 IN. (127 MM).

**THE HOURLY F RATING OF THE FIRESTOP SYSTEM IS EQUAL TO THE HOURLY FIRE RATING OF THE WALL ASSEMBLY IN WHICH IT IS INSTALLED. THE HOURLY T RATING IS 0 AND 1/2 HR FOR 1 AND 2 HR FIRE RATED ASSEMBLIES, RESPECTIVELY.**

2. **STEEL SLEEVE --** (OPTIONAL) - CYLINDRICAL SLEEVE FABRICATED FROM MIN 0.018 IN. (0.46 MM) THICK (NO. 28 GAUGE) GALV SHEET STEEL AND HAVING A MIN 1 IN. (25 MM) LAP ALONG THE LONGITUDINAL SEAM. LENGTH OF SLEEVE TO BE EQUAL TO OR MAX 2 IN. (51 MM) GREATER THAN THE THICKNESS OF WALL. ENDS OF SLEEVE TO BE FLUSH WITH OR EXTEND A MAX 1 IN. (25 MM) BEYOND EACH SURFACE OF WALL.

3. **CABLE --** MAX 4 IN. (102 MM) DIAM CABLE BUNDLE INSTALLED ECCENTRICALLY OR CONCENTRICALLY WITHIN OPENING. ANNULAR SPACE BETWEEN CABLE BUNDLE AND PERIPHERY OF OPENING OR SLEEVE TO BE MIN 0 IN. (0 MM, POINT CONTACT) TO MAX 1 IN. (25 MM). CABLE BUNDLE TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF WALL. THE FOLLOWING TYPES AND SIZES OF CABLES MAY BE USED:

A. MAX 200 PAIR NO. 22 AWG (OR SMALLER) COPPER CONDUCTOR WITH POLYVINYL CHLORIDE (PVC) INSULATION AND JACKETING MATERIAL.
B. MAX 1/C NO. 350 KCMIL (OR SMALLER) COPPER CONDUCTOR CABLE WITH CROSS-LINKED POLYETHYLENE (XLPE) OR PVC JACKET.
C. MAX 7/C NO. 12 AWG (OR SMALLER) COPPER CONDUCTOR POWER AND CONTROL CABLES WITH XLPE OR PVC INSULATION WITH XLPE OR PVC JACKET.
D. MAX 3/C NO. 4/0 AWG (OR SMALLER) COPPER OR ALUMINUM CONDUCTOR SER CABLES WITH XLPE OR PVC INSULATION AND JACKET.
E. MAX 4/C NO. 2/0 AWG (OR SMALLER) COPPER CONDUCTOR, ALUMINUM CLAD OR STEEL CLAD TECK 90 CABLE WITH OR WITHOUT PVC JACKETED.
F. MAX 110/125 FIBER OPTIC (F.O.) CABLE WITH PVC INSULATION AND JACKET.
G. MAX 3/C WITH GROUND NO. 8 AWG (OR SMALLER) COPPER CONDUCTOR NM CABLE WITH PVC INSULATION AND JACKET.
H. MAX RG/U COAXIAL CABLE WITH FLUORINATED ETHYLENE INSULATION AND JACKET.
I. MAX 4 PAIR NO. 24 AWG (OR SMALLER) COPPER CONDUCTOR DATA CABLE WITH HYLAR JACKET AND INSULATION.
J. **THROUGH PENETRATING PRODUCT***-ANY CABLES, **ARMORED CABLE+** OR **METAL CLAD CABLE+**CURRENTLY CLASSIFIED UNDER THE **THROUGH PENETRATING PRODUCT** CATEGORY.

SEE **THROUGH PENETRATING PRODUCT** (XHLY) CATEGORY IN THE FIRE RESISTANCE DIRECTORY FOR NAMES OF MANUFACTURERS.

4. **FILL, VOID OR CAVITY MATERIAL* - CAULK OR SEALANT --** MIN 5/8 IN. (16 MM) THICKNESS OF CAULK APPLIED WITHIN ANNULUS, FLUSH WITH BOTH SURFACES OF WALL. MIN 1/4 IN. (6 MM) DIAM BEAD OF CAULK APPLIED TO GYPSUM BOARD/CABLE BUNDLE INTERFACE AT POINT CONTACT LOCATION ON BOTH SIDES OF WALL.

**3M COMPANY** -- IC 15WB+, CP 25WB+ CAULK OR FB-3000 WT SEALANT

*** INDICATES SUCH PRODUCTS SHALL BEAR THE UL OR CUL CERTIFICATION MARK FOR JURISDICTIONS EMPLOYING THE UL OR CUL CERTIFICATION (SUCH AS CANADA), RESPECTIVELY.**

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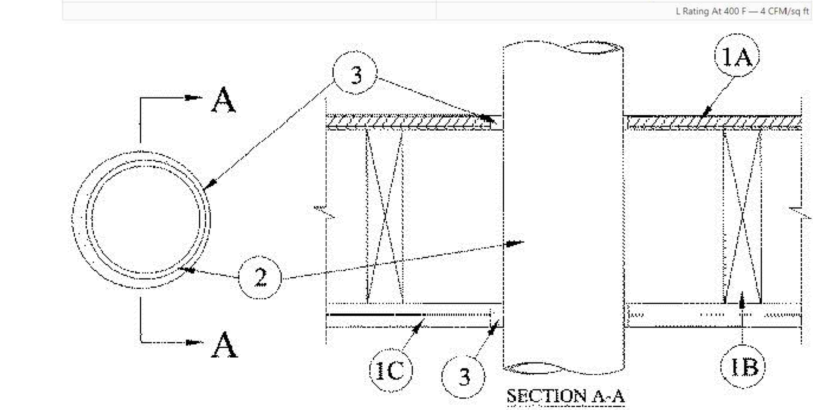
### WALL PENETRATION
### U.L. SYSTEM NO. W-L-3195

## SYSTEM NO. F-C-1059

DECEMBER 06,2018
**F RATINGS -- 1 AND 2 HR (SEE ITEM 1)**
**T RATINGS -- 0 AND 1/2 HR (SEE ITEM 1)**

| ANSI/UL1479 (ASTM E814) | CAN/ULC S115 |
|---|---|
| F Ratings — 1 and 2 Hr (See Item 1) | F Ratings — 1 and 2 Hr (See Item1) |
| T Ratings — 0 and 1/2 Hr (See Item 1) | FT Ratings — 0 and 1/2 Hr (See Item1) |
| L Rating At Ambient — Less Than 1 CFM/sq ft | FH Ratings — 1 and 2 Hr (See Item 1) |
| L Rating At 400 F — 4 CFM/sq ft | FTH Ratings — 0 and 1/2 Hr (See Item 1) |
| | L Rating At Ambient — Less Than 1 CFM/sq ft |
| | L Rating At 400 F — 4 CFM/sq ft |




SECTION A-A

1.**FLOOR-CEILING ASSEMBLY --** THE 1 OR 2 HR FIRE-RATED SOLID OR TRUSSED LUMBER JOIST FLOOR-CEILING ASSEMBLY SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER SPECIFIED IN THE INDIVIDUAL L500 SERIES FLOOR-CEILING DESIGNS IN THE UL FIRE RESISTANCE DIRECTORY. **THE F, FH RATING OF THE FIRESTOP SYSTEM IS EQUAL TO THE RATING OF THE FLOOR-CEILING AND WALL ASSEMBLIES. THE T, FT AND FTH RATING OF THE FIRESTOP SYSTEM IS 0 HR FOR 1 HR RATED FLOOR CEILING ASSEMBLY AND 1/2 HR FOR 2 HR RATED FLOOR CEILING ASSEMBLY.** THE GENERAL CONSTRUCTION FEATURES OF THE FLOOR-CEILING ASSEMBLY ARE SUMMARIZED BELOW:

A. **FLOORING SYSTEM --** LUMBER OR PLYWOOD SUBFLOOR WITH FINISH FLOOR OF LUMBER, PLYWOOD OR **FLOOR TOPPING MIXTURE*** AS SPECIFIED IN THE INDIVIDUAL FLOOR-CEILING DESIGN. MAX DIAM OF OPENING SHALL BE 7-5/8 IN. (194 MM).

B. **WOOD JOISTS* --** NOM 10 IN (254 MM) DEEP (OR DEEPER) LUMBER, STEEL OR COMBINATION LUMBER AND STEEL JOISTS, TRUSSES OR **STRUCTURAL WOOD MEMBERS*** WITH BRIDGING AS REQUIRED AND WITH ENDS FIRESTOPPED.

C. **GYPSUM BOARD* --** THICKNESS, TYPE, NUMBER OF LAYERS AND FASTENERS SHALL BE AS SPECIFIED IN THE INDIVIDUAL FLOOR-CEILING DESIGN. MAX DIAM OF OPENING SHALL BE 7-5/8 IN. (194 MM).

D. **FURRING CHANNELS --** (NOT SHOWN) (AS REQUIRED) RESILIENT GALVANIZED STEEL FURRING INSTALLED IN ACCORDANCE WITH THE MANNER SPECIFIED IN THE INDIVIDUAL L500 SERIES DESIGNS IN THE FIRE RESISTANCE DIRECTORY.

1.1 **CHASE WALL --** (NOT SHOWN, OPTIONAL)--THE THROUGH PENETRANTS (ITEM 2) MAY BE ROUTED THROUGH A 1 OR 2 HR FIRE-RATED SINGLE, DOUBLE OR STAGGERED WOOD STUD/GYPSUM WALLBOARD CHASE WALL HAVING A FIRE RATING CONSISTENT WITH THAT OF THE FLOOR-CEILING ASSEMBLY. THE CHASE WALL SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER SPECIFIED IN THE INDIVIDUAL U300 SERIES WALL AND PARTITION DESIGNS IN THE UL FIRE RESISTANCE DIRECTORY AND SHALL INCLUDE THE FOLLOWING CONSTRUCTION FEATURES :

A. **STUDS --** NOM 2 BY 8 IN. (51 BY 203 MM) LUMBER OR DOUBLE NOM 2 BY 6 IN. (51 BY 152 MM) LUMBER STUDS.
B. **SOLE PLATE --** NOM 2 BY 8 IN. (51 BY 203 MM) LUMBER OR PARALLEL 2 BY 6 IN. (51 BY 152 MM) LUMBER PLATES, TIGHTLY BUTTED. MAX DIAM OF OPENING SHALL BE 7-5/8 IN. (194 MM).
C. **TOP PLATE --** THE DOUBLE TOP PLATE SHALL CONSIST OF TWO NOM 2 BY 8 IN. (51 BY 203 MM) LUMBER PLATES OR TWO SETS OF NOM 2 BY 6 IN. (51 BY 152 MM) LUMBER PLATES TIGHTLY BUTTED. MAX DIAM OF OPENING IS 7-5/8 IN. (194 MM).
D. **GYPSUM BOARD* --** THICKNESS, TYPE, NUMBER OR LAYERS AND FASTENERS SHALL BE AS SPECIFIED IN INDIVIDUAL WALL AND PARTITION DESIGNS.

2.**THROUGH PENETRANTS --** ONE METALLIC TUBING, PIPE OR CONDUIT TO BE INSTALLED CONCENTRICALLY OR ECCENTRICALLY WITHIN THE FIRESTOP SYSTEM. ANNULAR SPACE BETWEEN PIPE OR CONDUIT AND EDGE OF OPENING TO BE MIN 1/4 IN. (6 MM) AND MAX 3/4 IN. (19 MM). PIPE, TUBING OR CONDUIT TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR-CEILING ASSEMBLY. THE FOLLOWING TYPES AND SIZES OF METALLIC PIPES, TUBING OR CONDUIT MAY BE USED:

A. **STEEL PIPE --** NOM 6 IN. (152 MM) DIAM (OR SMALLER) SCHEDULE 40 (OR HEAVIER) STEEL PIPE.
B. **IRON PIPE --** NOM 6 IN. (152 MM) DIAM (OR SMALLER) CAST OR DUCTILE PIPE.
C. **CONDUIT --** NOM 4 IN. (102 MM) DIAM (OR SMALLER) STEEL ELECTRICAL METALLIC TUBING OR NOM 6 IN. DIAM (OR SMALLER) STEEL CONDUIT.
D. **STEEL FLEXIBLE METAL CONDUIT + --** NOM 2 IN. (51 MM) DIAM (OR SMALLER) STEEL FLEXIBLE METAL CONDUIT.

SEE **FLEXIBLE METAL CONDUIT** (DXUZ) CATEGORY IN THE ELECTRICAL CONSTRUCTION MATERIALS DIRECTORY FOR NAMES OF MANUFACTURERS.

3.**FILL, VOID OR CAVITY MATERIAL*--SEALANT --** MIN 5/8 IN. (16 MM) OR 1-1/4 IN. (32 MM) THICKNESS OF SEALANT APPLIED WITHIN ANNULAR SPACE, FLUSH WITH THE BOTTOM SURFACE OF GYPSUM WALLBOARD OR LOWER TOP PLATE FOR 1 AND 2 HR FLOORS RESPECTIVELY. MIN. 3/4 IN. (19 MM) THICKNESS OF SEALANT APPLIED WITHIN ANNULAR SPACE, FLUSH WITH TOP SURFACE OF FLOOR OR SOLE PLATE.

**HILTI INC** -- FS-ONE SEALANT OR FS-ONE MAX INTUMESCENT SEALANT

+BEARING THE UL LISTING MARK.

*** INDICATES SUCH PRODUCTS SHALL BEAR THE UL OR CUL CERTIFICATION MARK FOR JURISDICTIONS EMPLOYING THE UL OR CUL CERTIFICATION (SUCH AS CANADA), RESPECTIVELY.**

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### FLOOR PENETRATION
### U.L. SYSTEM NO. F-C-1059

**KONTOGIANNIS**
& ASSOCIATES

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PLANNING
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PROJECT:

TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

ELECTRICAL FIRESTOP SYSTEMS

DATE: 06/26/2026
REVISED:

GEORGE J. KONTOGIANNIS REGISTERED ARCHITECT No. AR00034309 STATE OF INDIANA

GEORGE J. KONTOGIANNIS, LICENSE #AR00034309
EXPIRATION DATE 12/31/2027

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- ☐ SUBMISSION SET 06/27/2025
- ☐ ZONING SET 05/07/2026
- ■ BID SET 06/26/2026
- ☐ PERMIT SET
- ☐ CONSTRUCTION SET

# E3-3

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# ELECTRICAL SYMBOLS

| | |
|---|---|
| | SINGLE POLE SWITCH |
| 2 | DOUBLE POLE SWITCH |
| 3 | THREE WAY SWITCH |
| 4 | FOUR WAY SWITCH |
| OC | OCCUPANCY SENSORY SWITCH |
| D | DIMMER SWITCH |
| | DISCONNECT SWITCH |
| HC | HANDICAP SWITCH |
| K | KEYPAD / KEY FOB READER |
| B | DOOR BELL |
| | SINGLE RECEPTACLE OUTLET |
| | DUPLEX RECEPTACLE OUTLET |
| | SWITCHED OUTLET - TOP HALF ONLY |
| WP | DUPLEX RECEPTACLE OUTLET - WEATHERPROOF |
| GFCI | GROUND FAULT CIRCUIT INTERRUPTER RECEPTACLE |
| EMP | OUTLET ON EMERGENCY POWER |
| | SPECIAL OUTLET |
| | FLOOR/CEILING DUPLEX RECEPTACLE OUTLET |
| | PRIVATE TELEPHONE |
| | FLOOR TELEPHONE OUTLET - PRIVATE |
| | TELEPHONE PANEL |
| C | COMPUTER RECEPTACLE |
| TV | TELEVISION CABLE OUTLET |
| I | INTERNET CABLE OUTLET |
| | GARBAGE DISPOSAL |
| T | THERMOSTAT |
| | EXHAUST FAN IN ATTIC |
| | EXHAUST FAN |
| | EXHAUST FAN LIGHT |
| S | SPEAKER |
| # | SEE SPECIAL OUTLET SCHEDULE # |

| CEILING | WALL | |
|---|---|---|
| | | SURFACE/RECESS |
| J | J | JUNCTION BOX |
| | | EMERGENCY LIGHT |
| | | WRAP AROUND SURFACE LED LIGHT FIXTURE |
| | | LAY-IN / SURFACE FLAT PANEL LED LIGHT FIXTURE |
| | | LAY-IN / SURFACE FLAT PANEL LED LIGHT FIXTURE |
| | | CEILING FAN WITH LIGHT |
| | | TRACK LIGHTING |
| | | LOW VOLTAGE WIRING |
| | | CIRCUIT WIRING |
| | | SWITCH LEG |
| S | | LOW SOUNDER ALARM HORN / STROBE |
| H/S | | FIRE ALARM HORN / STROBE |
| F/M | | FIRE MINI ALARM HORN / STROBE |
| F | | FIRE ALARM PULL STATION |
| E | | EMERGENCY PULL CORD |
| S | | STROBE |
| S/A | | SMOKE DETECTOR |
| C/A | | CARBON MONOXIDE DETECTOR |
| D | | DOOR ALARM |
| DH | | DOOR HOLDER |
| | | EXIT SIGN WITH ARROW & BATTERY BACKUP |
| | | EXIT SIGN WITH EMERGENCY LIGHT, ARROW & BATTERY BACKUP |
| | | EMERGENCY LIGHT WITH BATTERY BACKUP |
| EC | | CEILING EMERGENCY CALL LIGHT |

## ELECTRIC LOADS

ONE BEDROOM (PANEL A-1)

| | | |
|---|---|---|
| LIGHTS & OUTLETS @ 3 W / SQ.FT. | | |
| 660 SQ. FT, X 3 W / SQ.FT. | = | 1.98 KW |
| 2 APPL. CIRC @ 1500 WATTS | = | 3.00 KW |
| ELECTRIC RANGE | = | 9.90 KW |
| DISPOSER | = | 0.70 KW |
| WASHER | = | 1.50 KW |
| DISHWASHER | = | 0.80 KW |
| DRYER | = | 4.40 KW |
| REFRIGERATOR | = | .70 KW |
| WATER HEATER | = | 4.5 KW |
| SUBTOTAL | = | 27.48 KW |
| HEAT PUMP = 2.27 ELECTRIC | = | 2.27 KW |
| RESISTANCE HEAT = 3.8 | = | 3.80 KW |
| TOTAL CONNECTED LOAD | = | 33.55 KW |
| DEMAND PER 220.82 | | |
| FIRST 10 KW @ 100% | = | 10.00 KW |
| REST 17.48 KW @ 40% | = | 6.99 KW |
| HEAT PUMP (2.27) +65%(3.8KW) | = | 4.74 KW |
| TOTAL LOAD | = | 21.73 KW |
| 21.73 KW / .208 | = | 104.47 AMPS |

USE 125/2 CIRCUIT BREAKER WITH #1/0 SER ALUMINUM CABLE (XHHW)

TWO BEDROOM (PANEL B-1)

| | | |
|---|---|---|
| LIGHTS & OUTLETS @ 3 W / SQ.FT. | | |
| 840 SQ. FT, X 3 W / SQ.FT. | = | 2.50 KW |
| 2 APPL. CIRC @ 1500 WATTS | = | 3.00 KW |
| ELECTRIC RANGE | = | 9.90 KW |
| DISPOSER | = | 0.70 KW |
| WASHER | = | 1.50 KW |
| DISHWASHER | = | 0.80 KW |
| DRYER | = | 4.40 KW |
| REFRIGERATOR | = | .70 KW |
| WATER HEATER | = | 4.5 KW |
| SUBTOTAL | = | 28.00 KW |
| HEAT PUMP = 2.27 ELECTRIC | = | 2.27 KW |
| RESISTANCE HEAT = 5.6 | = | 5.60 KW |
| TOTAL CONNECTED LOAD | = | 35.87 KW |
| DEMAND PER 220.82 | | |
| FIRST 10 KW @ 100% | = | 10.00 KW |
| REST 18.0 KW @ 40% | = | 7.20 KW |
| HEAT PUMP (2.27) +65%(5.6KW) | = | 5.91 KW |
| TOTAL LOAD | = | 23.11 KW |
| 23.11 KW / .208 | = | 111.1 AMPS |

USE 125/2 CIRCUIT BREAKER WITH #1/0 SER ALUMINUM CABLE (XHHW)

ONE BEDROOM (PANEL A-2)

| | | |
|---|---|---|
| LIGHTS & OUTLETS @ 3 W / SQ.FT. | | |
| 660 SQ, FT, X 3 W / SQ.FT. | = | 1.98 KW |
| 2 APPL. CIRC @ 1500 WATTS | = | 3.00 KW |
| ELECTRIC RANGE | = | 9.90 KW |
| DISPOSER | = | 0.70 KW |
| WASHER | = | 1.50 KW |
| DISHWASHER | = | 0.80 KW |
| DRYER | = | 4.40 KW |
| REFRIGERATOR | = | .70 KW |
| WATER HEATER | = | 4.5 KW |
| SUBTOTAL | = | 27.48 KW |
| HEAT PUMP = 2.27 ELECTRIC | = | 2.27 KW |
| RESISTANCE HEAT = 5.6 | = | 5.6 KW |
| TOTAL CONNECTED LOAD | = | 35.35 KW |
| DEMAND PER 220.82 | | |
| FIRST 10 KW @ 100% | = | 10.00 KW |
| REST 17.48 KW @ 40% | = | 6.99 KW |
| HEAT PUMP (2.27) +65%(5.6KW) | = | 5.91 KW |
| TOTAL LOAD | = | 22.90 KW |
| 22.90 KW / .208 | = | 110 AMPS |

USE 125/2 CIRCUIT BREAKER WITH #1/0 SER ALUMINUM CABLE (XHHW)

TWO BEDROOM (PANEL B-2)

| | | |
|---|---|---|
| LIGHTS & OUTLETS @ 3 W / SQ.FT. | | |
| 840 SQ, FT, X 3 W / SQ.FT. | = | 2.50 KW |
| 2 APPL. CIRC @ 1500 WATTS | = | 3.00 KW |
| ELECTRIC RANGE | = | 9.90 KW |
| DISPOSER | = | 0.70 KW |
| WASHER | = | 1.50 KW |
| DISHWASHER | = | 0.80 KW |
| DRYER | = | 4.40 KW |
| REFRIGERATOR | = | .70 KW |
| WATER HEATER | = | 4.5 KW |
| SUBTOTAL | = | 28.00 KW |
| HEAT PUMP = 2.80 ELECTRIC | = | 2.80 KW |
| RESISTANCE HEAT = 5.6 | = | 5.60 KW |
| TOTAL CONNECTED LOAD | = | 36.40 KW |
| DEMAND PER 220.82 | | |
| FIRST 10 KW @ 100% | = | 10.00 KW |
| REST 18.0 KW @ 40% | = | 7.20 KW |
| HEAT PUMP (2.80) +65%(5.6KW) | = | 6.44 KW |
| TOTAL LOAD | = | 23.64 KW |
| 23.64 KW / .208 | = | 113.65 AMPS |

USE 125/2 CIRCUIT BREAKER WITH #1/0 SER ALUMINUM CABLE (XHHW)

# SPECIAL OUTLETS

1. RANGE HOOD & MICROWAVE SHALL BE SUPPLIED BY THE GENERAL CONTRACTOR AND INSTALLED BY THE ELECTRICAL CONTRACTOR. PROVIDE ALL ELECTRICAL CONNECTIONS AND WIRE TO SEP. 15/1 CIRCUIT - USE #14 WIRE. PROVIDE OUTLET IN WALL CABINET.
2. ELECTRIC RANGE BY GENERAL CONTRACTOR. PROVIDE 40 AMP OUTLET, WIRE BACK TO 40/2 CIRCUIT BREAKER, USE #8 WIRE AND MAKE ALL CONNECTIONS. LOCATE OUTLET PER APPLIANCE MANUFACTURER'S RECOMMENDATIONS.
3. EXHAUST FANS SHALL BE PROVIDED AND INSTALLED BY THE HEATING CONTRACTOR. WIRE IN WITH LIGHTING CIRCUIT AS SHOWN AND MAKE ALL CONNECTIONS. PROVIDE OCCUPANCY SENSOR SWITCH IN LOCATIONS SHOWN.
4. DISPOSAL SHALL BE PROVIDED AND INSTALLED BY PLUMBING CONTRACTOR. UNIT HAS CORD W/ PLUG - INSTALL OUTLET UNDER SINK, WIRE SWITCH TO 15/1 CIRCUIT BREAKER, USE #14 WIRE AND MAKE ALL CONNECTIONS.
5. DISHWASHER BY GENERAL CONTRACTOR. PROVIDE OUTLET UNDER SINK & PIGTAIL CORD WITH PLUG LONG ENOUGH TO ALLOW DISHWASHER TO BE PULLED OUT. WIRE TO AFI/GFCI BREAKER.
6. WASHER BY GENERAL CONTRACTOR. PROVIDE WALL MOUNTED SINGLE OUTLET MOUNTED AT 42" A.F.F. WIRE BACK TO 20/1 CIRCUIT BREAKER, USE #12 WIRE AND MAKE ALL CONNECTIONS. (VERIFY IF WASHER BOX HAS AN OUTLET.)
7. DRYER BY GENERAL CONTRACTOR. PROVIDE WALL MOUNTED OUTLET AT 42" A.F.F. WIRE BACK TO 30/2 CIRCUIT BREAKER, USE #10 WIRE AND MAKE ALL CONNECTIONS.
8. HOUSEHOLD FIRE DETECTION CEILING MOUNTED AS SHOWN, SHALL BE INSTALLED IN ACCORDANCE WITH 2017 FIRE CODE AND NFPA 70 MANUAL. WIRE INTO BEDROOM LIGHTING CIRCUIT. INTERCONNECT DETECTOR SO THAT IF ONE DETECTOR ALARMS ALL DETECTORS ALARM (PROVIDE BATTERY BACKUP). PROVIDE STROBE UNIT IN (504) AND SENSORY UNITS. PER 2013 NFPA CODE 72, INSTALL AT 3'-6" MIN DISTANCE FROM BATHROOM DOOR , 3'-0" MIN DISTANCE FROM HVAC SUPPLY/RETURN REGISTER, AND 10'-0" FROM ANY FIXED COOKING APPLIANCE IN KITCHEN.
9. GROUND FAULT BATH RECEPTACLE (G.F.I.) ABOVE COUNTER AT 42" A.F.F. AS SHOWN. OUTLET IN SECOND BATH IS FED DOWNSTREAM THROUGH THIS DEVICE AS APPLICABLE. WIRE TO SEPARATE 20/1 CIRCUIT BREAKER USE #12 WIRE.
10. GROUND FAULT RECEPTACLE (G.F.I.) IN BACKSPLASH OR ON WALL. WIRE IN WITH APPLIANCE CIRCUITRY.
11. WALL MOUNTED ELECTRIC BLOWER COIL UNIT WITH ELECTRIC HEAT STRIP. UNIT SHALL HAVE A DISCONNECT PROVIDED ON THE UNIT. WIRE TO A CIRCUIT BREAKER AS SHOWN.
12. WEATHERPROOF OUTLET PROVIDE GFI OUTLET AND WIRE IN WITH ADJACENT OUTLETS, OR WIRE DOWNSTREAM OF BATH GFI OUTLET.
13. PAD MOUNTED HEAT PUMP CONDENSER. PROVIDE WALL MOUNTED DISCONNECT AND WIRE TO PANEL. PROVIDE WEATHERPROOF OUTLETS WITHIN 25 FEET OF CONDENSERS.
14. ELECTRIC WATER HEATER. UNIT HAS 4,500 WATT ELEMENT. PROVIDE WALL MTD. DISCONNECT PER CODE. WIRE TO 30/2 CIRCUIT BREAKER. USE #10 WIRE & MAKE ALL CONNECTIONS.
15. PROVIDE U/L LISTED FAN JUNCTION BOX SECURELY MOUNTED FOR ALL CEILING FANS. JUNCTION BOX SHALL BE U/L LISTED CEILING FAN BOX.
16. PROVIDE LOW SOUNDER UNIT WITH STROBE AT PILLOW LOCATION CONNECTED TO THE FIRE ALARM SYSTEM PER NFPA 72. PROVIDE STROBE IN BATH & LIVING ROOM OF 504 UNITS TIED TO FIRE ALARM.
17. PROVIDE PRE-WIRE & ROUGH-IN FOR CABLE / PHONE SYSTEM. PROVIDE A CABLE BOX (PER LOCAL CABLE PROVIDER) WITH A 120 VOLT OUTLET. WIRE UNIT OUTLETS TO CABLE BOX THEN HOME RUN TO CENTRAL LOCATION FOR CONNECTION TO CABLE. PRICE BOTH RG6 & CAT 6.
18. WALL SCONCES WIRE WALL SCONCES TOGETHER & RUN BACK TO A TIMER IN THE MECHANICAL ROOM TO ALLOW LIGHTS TO BE TURNED OFF AT NIGHT.
19. PROVIDE STROBE / AUDIBLE 120 VOLT DOOR BELL UNIT W/ WIRELESS BUTTON OUTSIDE UNIT ENTRY DOOR. PROVIDE OUTLET @ 7'-0" A.F.F. BACK-TO-BACK IN LIVING ROOM / BEDROOM. INSTALL PUSH BUTTON AT DOOR ENTRY. PROVIDE MODEL WC180 PLUG-IN UNIT IN LIVING ROOM & BEDROOM. TEST UNIT & SET FOR AUDIBLE & STROBE SIGNAL.
20. PROVIDE TWO-WAY COMMUNICATION EMERGENCY PHONE SYSTEM. PROVIDE A RECESSED CALL STATION AT THE ELEVATOR ON THE 2ND, 3RD, AND 4TH FLOORS. PROVIDE CENTRAL COMMAND CENTER ON THE FIRST FLOOR. SYSTEM SHALL HAVE CAPABILITY TO CALL OFFSITE IF COMMAND CENTER DOES NOT ANSWER SYSTEM SHALL BE COMPLIANT WITH IBC, NFFA 72, ICCA117.1 (2017) & ADAAG (2010)
21. BATH EXHAUST FAN. PROVIDE 120 VOLT POWER TO ALLOW FAN TO RUN CONTINUOUS AT SET LOW SPEED. WIRE IN WITH ADJACENT BATH TUB LIGHT SO THAT WHEN LIGHT IS TURNED ON THE FAN WALL RAMP UP TO A HIGHER CFM SETTING (60 CFM). WHEN LIGHT IS TURNED OFF THE FAN WILL RETURN TO THE CONTINUOUS LOWER CFM SETTING.

# ELECTRICAL NOTES

1. ALL BRANCH CIRCUIT WIRING SHALL BE COPPER. ALUMINUM MAY BE USED ONLY FOR SERVICE ENTRANCE FEEDS TO UNIT PANELS.
2. OUTLETS & SWITCHES IN KITCHENS SHALL BE AT 44" AFF. OUTLETS & SWITCHES IN BATHROOMS SHALL BE AT 42" AFF. ALL OTHER OUTLETS SHALL BE AT 15" MIN. AFF. & ALL OTHER LIGHT SWITCHES SHALL BE AT 48" AFF. TO TOP.
3. ALL WORK SHALL BE IN ACCORDANCE W/THE NATIONAL ELECTRIC CODE & ALL APPLICABLE STATE, CITY, & LOCAL CODES.
4. COORDINATE ALL WORK WITH ASSOCIATED TRADES. VERIFY ELECTRICAL REQUIREMENTS W/SUBTRADES PROVIDING ITEMS REQUIRING HOOK-UPS (I.E. FURNACES, FANS, APPLIANCES, ETC. )
5. COORDINATE WIRING OF TELEPHONE SERVICE & CABLE TV. PROVIDE ALL LABOR & MATERIALS REQUIRED FOR A COMPLETE INSTALLATION BUT NOT SUPPLIED BY TELEPHONE OR TV CABLE COMPANY.
6. WIRE ONE OF EACH TYPICAL UNIT AS COMPLETELY AS POSSIBLE. REVIEW LOCATIONS OF ALL ITEMS W/THE INSPECTOR, ARCHITECT, SUPERINTENDENT, & ASSOCIATED TRADES. CORRECT ANY ERRORS AND THEN PROCEED WITH LIKE UNITS. ANY MISTAKES REPEATED FROM UNIT TO UNIT BECAUSE OF FAILURE TO REVIEW TYPICAL UNIT SHALL BE CORRECTED @ THIS CONTRACTORS EXPENSE.
7. ALL WIRING MUST BE RUN WITHIN WALLS. IN AREAS WHERE WIRING MUST BE RUN EXPOSED, ALL WIRING MUST BE IN RIGID CONDUIT.
8. ELECTRIC PANELS EXPOSED TO VIEW (OTHER THAN IN MECHANICAL ROOMS) SHALL HAVE THE COVER AND DOOR SANDED AND PAINTED TO MATCH THE WALL WITH SEMI-GLOSS OR EGGSHELL ENAMEL BEFORE COVER IS INSTALLED ON PANEL
9. UNIT SMOKE DETECTORS MAY NOT BE INSTALLED UNTIL AFTER FINAL CLEANUP OF UNITS TO PREVENT DUST FROM ACCUMULATING IN THE CHAMBER. IF ELECTRICIAN WISHES TO INSTALL UNITS PRIOR TO FINAL CLEANUP THEY SHALL BE COVERED TIGHTLY WITH A SMALL PIECE OF PLASTIC BAG WITH RUBBER BAND.
10. COORDINATE ELECTRIC SERVICE W/ POWER CO. VERIFY AVAILABLE FAULT CURRENT PRIOR TO ORDERING METER UNITS - NOTIFY ARCHITECT OF ANY LOCATIONS WHERE FAULT CURRENT IS ABOVE 10,000 A.I.C. PROVIDE ALL LABOR & MATERIALS STARTING AT THE TRANSFORMER FOR ALL WORK NOT BEING DONE BY POWER CO. BUT NECESSARY FOR COMPLETE INSTALLATION.

# LIGHT FIXTURE SCHEDULE

| MARK | MANUFACTURER | CATALOG NUMBER | LAMP | MT'G. TYPE | REMARKS |
|---|---|---|---|---|---|
| A | GENERATION LIGHTING | 44852EN3-965 | (3) 9.5W LED A19 | WALL | |
| B | GENERATION LIGHTING | 75434EN3-962 | (1) 9.3W LED A19 | CEILING | 3000K BRUSHED NICKEL |
| C | GENERATION LIGHTING | 75952EN3-962 | (2) 10W LED A19 | CEILING | |
| D | HALO | SLD606930WH | (1) 13.2W LED | CEILING | 780 LUMENS |
| E | HALO | SLD612930WH | (1) 14.8W LED | CEILING | 1000 LUMENS |
| F | PROGRESS | P250016-030W / P2659-09 | (2) 10W LED | CEILING | CEILING FAN WITH LIGHT KIT & CLOSE TO CEILING ACCESSORY |
| G | LITHONIA | FMLWL 48 827 | (1) 40W LED | CEILING | |
| H | WAC LIGHTING | WS-180414-30-BN | (1) 12W LED | WALL | MOUNT 6'-2" A.F.F. / ADA COMPLIANT |
| J | GENERATION LIGHTING | 75435EN3-962 | (2) 9.3W LED A19 | CEILING | 3000K BRUSHED NICKEL |
| K | SURE-LITES | LPXC25 | LED | CEILING/WALL | SEE PLANS FOR MOUNTING LOCATIONS |
| L | SURE-LITES | SEL50 | LED | CEILING/WALL | SEE PLANS FOR MOUNTING LOCATIONS |
| M | GENERATION LIGHTING | 6130701EN3-112 | (1) 9.3W LED A19 | CEILING | |
| N | GENERATION LIGHTING | 88241EN3-780 | (1) 9.3W LED A19 | WALL | |
| P | LITHONIA | CPANL | 2400/3300/4400 LUMENS | CEILING | 2x2 LAY- IN LED 2400/3300/4400 LUMENS 3500 K, 22/31/41 WATTS |
| Q | GENERATION LIGHTING | 75436EN3-962 | (3) 9W LED A19 | CEILING | 3000K BRUSHED NICKEL |
| R | SURE-LITES | SEL SERIES REMOTE (SRP) | LED | CEILING | |
| S | LITHONIA | CPANL AL01 SWW7 M4 W/ DCMK14 | | CEILING | DIRECT TO CEILING MOUNTING LED 2400/3300/4400 LUMENS 3500 K, 22/31/41 WATTS |
| T | LITHONIA | CPANL AL06 SWW7 M2 W/ DCMK224 | | CEILING | DIRECT TO CEILING MOUNTING LED 4000/5000/6000 LUMENS 3500 K, 36/45/55 WATTS |
| U | WAC | H-8010-30 WH (4) | 11W LED 3000K - 850 ML | | 8FT TRACK W/ 4 HEADS |
| V | LITHONIA | CSVT L48 | 4829 LUMENS (42 WATTS) 3500K LED | WALL | VAPOR TIGHT |
| | | | | | |

NOTE: ALL LIGHTS TO MEET ENERGY STAR RATINGS - BULBS TO BE 20,000 HOURS

## APARTMENT UNIT LOAD SUMMARY

| UNIT | PANEL | # UNITS | UNIT LOAD | TOTAL |
|---|---|---|---|---|
| ONE BR. | A-1 | 17 | 33.55 KW | 570.35 KW |
| ONE BR. | A-2 | 14 | 35.35 KW | 494.90 KW |
| TWO BR. | B-1 | 11 | 35.87 KW | 394.57 KW |
| TWO BR. | B-2 | 4 | 36.40 KW | 145.60 KW |
| TOTAL | | 46 | | 1,605.42 KW |

DEMAND PER NEC 220.84

| | | |
|---|---|---|
| 1,605.42 KW x .26 | = | 417.41 KW |
| 417.41 KW / .208 / 1.732 | = | 1,158.65 AMPS |

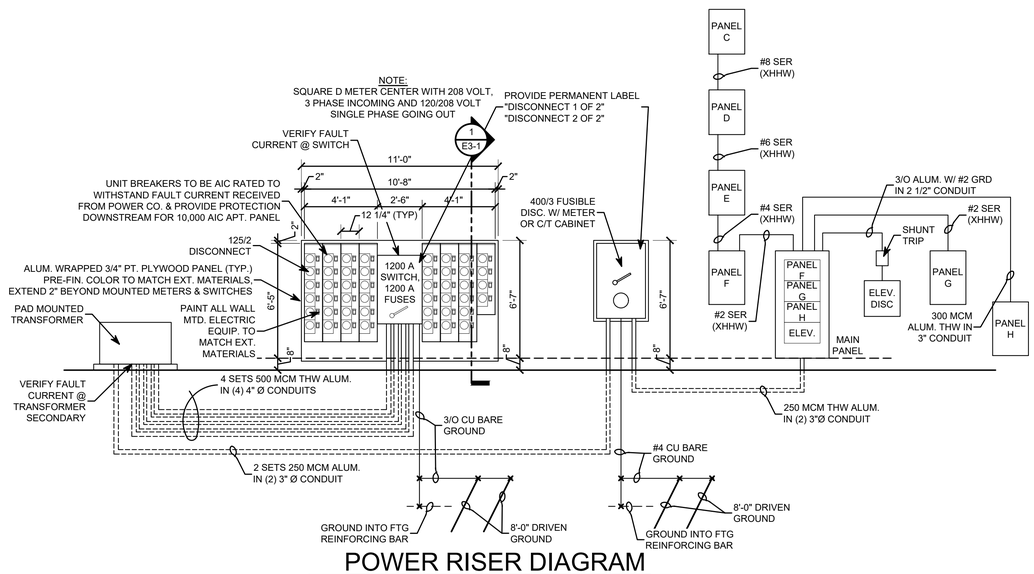
USE 1,200 AMP FUSIBLE SWITCH WITH 1,200 AMP CURRENT LIMITING FUSES

## HOUSE PANEL LOADS

| | LIGHTS | OUTLETS | HEAT PUMPS | SUPPL. ELEC. HEAT | APPLS. | OTHER | TOTAL |
|---|---|---|---|---|---|---|---|
| PANEL C | 1.5 | 2.46 | 2.80 | | | 1.3 | 8.06 KW |
| PANEL D | 1.2 | 1.86 | .032 | | | | 3.09 KW |
| PANEL E | 1.2 | 2.76 | .032 | | | | 3.99 KW |
| PANEL F | 1.8 | 2.58 | 2.80 | 2.0 | | | 9.18 KW |
| PANEL G | 0.9 | 9.18 | | 15.2 | 7.5 | 4.8 | 37.58 KW |
| PANEL H | 1.87 | 5.00 | 21.32 | | 27.0 | 16.0 | 71.19 KW |
| ELEVATOR | | | | | | | 18.65 KW |
| SUBTOTAL | 8.47 | 23.84 | 26.98 | 17.2 | 34.5 | 22.1 | 151.84 KW |
| DEMAND PER NEC 220.44 | | | | | | | |
| FIRST 10KW | | 10.00 | | 65% 11.18 | | | |
| REST @ .5 | | 6.92 | | | | | |
| TOTAL | 8.47 | 16.92 | 26.98 | 11.18 | 34.5 | 22.1 | 138.80 KW |

138.8 KW / .208 / 1.732 = 385.28 AMPS

USE 400 AMP FUSIBLE SWITCH WITH 400 AMP CURRENT LIMITING FUSES




POWER RISER DIAGRAM

SCALE: N.T.S.


KONTOGIANNIS & ASSOCIATES

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PROJECT:

TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

ELECTRICAL LIGHT FIXTURE SCHEDULE, NOTES & DETAILS

DATE: 06/26/2026
REVISED:

GEORGE J. KONTOGIANNIS REGISTERED No. AR00034309 STATE OF INDIANA ARCHITECT

GEORGE J. KONTOGIANNIS, LICENSE #AR00034309
EXPIRATION DATE 12/31/2027


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- ☐ SUBMISSION SET 06/27/2025
- ☐ ZONING SET 05/07/2026
- ■ BID SET 06/26/2026
- ☐ PERMIT SET
- ☐ CONSTRUCTION SET

E3-1


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PANEL G (1ST FL.) VOLTAGE 120/208 3 PHASE 4 WIRE MOUNTING SURFACE

MAIN BREAKER _____ MAIN LUGS 125 AMP MAIN FEEDERS #2 SER (XHHW) (4-WIRE)

| CIRC. NO. | LOAD | KW | CB/P | WIRE SIZE | ABC | WIRE SIZE | CB/P | KW | LOAD | CIRC. NO. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | OVEN | 2.2 | 30/2 | #10 | | #14 | 15/1 | 1.2 | MICROWAVE 013 | 2 |
| 3 | | 2.2 | | | | #14 | 15/1 | .7 | REFRIGERATOR 013 | 4 |
| 5 | APPLIANCE CIRCUIT | 1.5 | 20/1 GFCI | #12 | | #14 | 15/1 | 1.44 | ROOM 013 OUTLETS | 6 |
| 7 | LIGHTS 011, 012, 013 & 014 | .2 | 15/1 | #14 | | #6 | 60/2 | 3.8 | HVAC-9 | 8 |
| 9 | DRINKING FOUNTAIN | 1.0 | 15/1 | #14 | | | | 3.8 | | 10 |
| 11 | DISPOSAL | .7 | 15/1 | #14 | | #12 | 20/1 GFCI | 1.5 | RESTROOM OUTLETS | 12 |
| 13 | FIRE PLACE | .3 | 15/1 | #14 | | #12 | 20/1 | 1.26 | OUTLETS 008, 009, 010 | 14 |
| 15 | LIGHTS 008, 009, 010 | .3 | 15/1 | #14 | | #12 | 20/1 GFCI | .72 | PORCH OUTLETS | 16 |
| 17 | ELECTRIC DOOR OPENER | .4 | 15/1 | #14 | | #14 | 15/1 | .2 | PORCH LIGHTS | 18 |
| 19 | OUTLETS 015 & 016 | 1.26 | 20/1 | #12 | | #14 | 15/1 | .2 | LIGHTS 015 & 016 | 20 |
| 21 | HVAC-8 | 3.8 | 60/2 | #6 | | #14 | 15/1 | .5 | REFRIGERATOR | 22 |
| 23 | | 3.8 | | | | #12 | 20/1 | 1.5 | APPLIANCE CIRCUIT | 24 |
| 25 | WATER HEATER | 1.5 | 20/1 | #12 | | #12 | 20/1 | .8 | FIRE ALARM | 26 |
| 27 | | | | | | #12 | 20/1 | .8 | INTERCOM | 28 |
| 29 | | | | | | | | | | 30 |
| 31 | | | | | | | | | | 32 |
| 33 | | | | | | | | | | 34 |
| 35 | | | | | | | | | | 36 |
| 37 | | | | | | | | | | 38 |
| 39 | | | | | | | | | | 40 |
| 41 | | | | | | | | | | 42 |

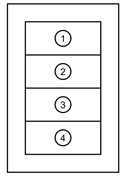
PANEL H (1ST FL.) VOLTAGE 120/208 3 PHASE 4 WIRE MOUNTING SURFACE

MAIN BREAKER _____ MAIN LUGS 225 MAIN FEEDERS _____

| CIRC. NO. | LOAD | KW | CB/P | WIRE SIZE | ABC | WIRE SIZE | CB/P | KW | LOAD | CIRC. NO. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | HVAC-10 | 2.8 | 50/2 | #6 | | #6 | 50/2 | 2.8 | HVAC-11 | 2 |
| 3 | | 2.8 | | | | | | 2.8 | | 4 |
| 5 | HVAC-10 CONDENSER | 1.13 | 15/2 HACR | #14 | | #14 | 50/2 HACR | 1.13 | HVAC-11 CONDENSER | 6 |
| 7 | | 1.13 | | | | | | 1.13 | | 8 |
| 9 | HVAC-9 CONDENSER | 1.4 | 20/2 HACR | #12 | | #12 | 20/2 HACR | 1.4 | HVAC-8 CONDENSER | 10 |
| 11 | | 1.4 | | | | | | 1.4 | | 12 |
| 13 | LIGHTS 005 | .57 | 15/1 | #14 | | #14 | 15/1 | .2 | LIGHTS 006 & OUTDOOR | 14 |
| 15 | OUTLETS 005 | 1.26 | 20/1 | #12 | | #12 | 20/1 | .9 | OUTLETS 006 | 16 |
| 17 | A/C OUTLETS | .36 | 20/1 GFCI | #12 | | #14 | 15/1 | .3 | CORRIDOR & ENTRY LOBBY | 18 |
| 19 | SUMP PUMP | .5 | 20/1 GFCI | #12 | | #12 | 20/1 | .36 | ELEVATOR OUTLETS | 20 |
| 21 | SUMP PUMP | .5 | 20/1 GFCI | #12 | | #14 | 15/1 | .1 | ELEVATOR LIGHTS | 22 |
| 23 | LIGHTS 004 & 007 | .5 | 15/1 | #14 | | #12 | 20/1 | .9 | OUTLETS 004 | 24 |
| 25 | WASHER | 1.0 | 15/1 | #14 | | #10 | 30/2 | 2.2 | DRYER | 26 |
| 27 | WASHER | 1.0 | 15/1 | #14 | | | | 2.2 | | 28 |
| 29 | WASHER | 1.0 | 15/1 | #14 | | #10 | 30/2 | 2.2 | DRYER | 30 |
| 31 | WASHER | 1.0 | 15/1 | #14 | | | | 2.2 | | 32 |
| 33 | WASHER | 1.0 | 15/1 | #14 | | #10 | 30/2 | 2.2 | DRYER | 34 |
| 35 | OUTLETS 007 | .72 | 20/1 GFCI | #12 | | | | 2.2 | | 36 |
| 37 | WATER HEATER | 5.0 | 50/3 | #6 | | #10 | 30/2 | 2.2 | DRYER | 38 |
| 39 | | 5.0 | | | | | | 2.2 | | 40 |
| 41 | | 5.0 | | | | #10 | 30/2 | 2.2 | DRYER | 42 |
| 43 | STAIR LIGHTS | .7 | 20/1 | #12 | | | | 2.2 | | 44 |
| 45 | | | | | | | | | | 46 |
| 47 | | | | | | | | | | 48 |
| 49 | | | | | | | | | | 50 |
| 51 | | | | | | | | | | 52 |
| 53 | | | | | | | | | | 54 |
| 55 | | | | | | | | | | 56 |
| 57 | | | | | | | | | | 58 |
| 59 | | | | | | | | | | 60 |

MAIN PANEL

SQUARE "D" 400 AMP MAIN LUGS FUSIBLE SERVICE ENTRANCE PANEL WITH QMB FUSIBLE BRANCH SWITCHES AS FOLLOWS (MIN. 100,000 AIC RATING) VERIFY AVAILABLE FAULT CURRENT WITH POWER COMPANY) AIC CAN BE REDUCED BASED ON AVAILABLE FAULT CURRENT.




1. PANEL F - 100/3 SWITCH W/ 100 AMP CURRENT LIMITING FUSES W/ #2 ALUM. SER (XHHW) 4-WIRE
2. PANEL G - 100/3 SWITCH W/ 100 AMP CURRENT LIMITING FUSES. #2 ALUM. SER (XHHW)
3. PANEL H - 400/3 SWITCH W/ 225 AMP CURRENT LIMITING FUSES. 300 MCM ALUM. THW W/ #2 GROUND IN 3" CONDUIT.
4. ELEVATOR - 200/3 W/ 150 AMP CURRENT LIMITING FUSES. 3/0 ALUM. THW W/ #2 GROUND IN 2 1/2" CONDUIT.

PANEL C (4TH FL.) VOLTAGE 120/208 3 PHASE 4 WIRE MOUNTING SURFACE

MAIN BREAKER _____ MAIN LUGS 100 AMP MAIN FEEDERS #8 SER XHHW CABLE (4-WIRE)

| CIRC. NO. | LOAD | KW | CB/P | WIRE SIZE | ABC | WIRE SIZE | CB/P | KW | LOAD | CIRC. NO. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | HVAC-4 | 28 W | 15/2 | #14 | | #12 | 20/1 | 1.26 | CORRIDOR & STAIR OUTLETS | 2 |
| 3 | | 28 W | | | | #14 | 15/1 | .6 | CORRIDOR & STAIRS LIGHTS & FANS | 4 |
| 5 | RADON FAN | .3 | 15/1 | #14 | | #12 | 20/1 | 1.0 | ELEVATOR CONTROLS | 6 |
| 7 | STAIR & MECH LIGHTS & OUTLETS | .6 | 20/1 | #12 | | #12 | 20/1 | .6 | MEDIA OUTLET | 8 |
| 9 | ROOF LIGHTS | .3 | 15/1 | #14 | | #12 | 20/1 GFCI | .6 | ROOF OUTLETS | 10 |
| 11 | HVAC-4/5 CONDENSER | 1.35 | 25/2 HACR | #10 | | | | | | 12 |
| 13 | | 1.35 | | | | | | | | 14 |
| 15 | | | | | | | | | | 16 |
| 17 | | | | | | | | | | 18 |
| 19 | | | | | | | | | | 20 |
| 21 | | | | | | | | | | 22 |
| 23 | | | | | | | | | | 24 |

PANEL D (3RD FL.) VOLTAGE 120/208 3 PHASE 4 WIRE MOUNTING SURFACE

MAIN BREAKER _____ MAIN LUGS 100 AMP MAIN FEEDERS #6 SER XHHW CABLE (4-WIRE)

| CIRC. NO. | LOAD | KW | CB/P | WIRE SIZE | ABC | WIRE SIZE | CB/P | KW | LOAD | CIRC. NO. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | HVAC-5 | 16 W | 15/2 | #14 | | #12 | 20/1 | 1.26 | CORRIDOR & STAIR OUTLETS | 2 |
| 3 | | 16 W | | | | #14 | 15/1 | .6 | CORRIDOR & STAIRS LIGHTS & FANS | 4 |
| 5 | STAIR & MECH LIGHTS & OUTLETS | .6 | 20/1 | #12 | | #12 | 20/1 | .6 | MEDIA OUTLET | 6 |
| 7 | PANEL C FEEDER | 2.67 | 40/3 | #8 | | | | | | 8 |
| 9 | | 2.67 | | | | | | | | 10 |
| 11 | | 2.67 | | | | | | | | 12 |
| 13 | | | | | | | | | | 14 |
| 15 | | | | | | | | | | 16 |
| 17 | | | | | | | | | | 18 |
| 19 | | | | | | | | | | 20 |
| 21 | | | | | | | | | | 22 |
| 23 | | | | | | | | | | 24 |

PANEL E (2ND FL.) VOLTAGE 120/208 3 PHASE 4 WIRE MOUNTING SURFACE

MAIN BREAKER _____ MAIN LUGS 100 AMP MAIN FEEDERS #4 ALUM. (XHHW) SER CABLE (4-WIRE)

| CIRC. NO. | LOAD | KW | CB/P | WIRE SIZE | ABC | WIRE SIZE | CB/P | KW | LOAD | CIRC. NO. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | HVAC-6 | 16 W | 15/2 | #14 | | #12 | 20/1 | 1.26 | CORRIDOR & STAIR OUTLETS | 2 |
| 3 | | 16 W | | | | #14 | 15/1 | .6 | CORRIDOR & STAIRS LIGHTS & FANS | 4 |
| 5 | STAIR & MECH LIGHTS & OUTLETS | .6 | 20/1 | #12 | | #12 | 20/1 | .6 | MEDIA OUTLET | 6 |
| 7 | PANEL D FEEDER | 3.7 | 50/3 | #4 SER | | #12 | 20/1 GFCI | .9 | A/C OUTLETS | 8 |
| 9 | | 3.7 | | | | | | | | 10 |
| 11 | | 3.7 | | | | | | | | 12 |
| 13 | | | | | | | | | | 14 |
| 15 | | | | | | | | | | 16 |
| 17 | | | | | | | | | | 18 |
| 19 | | | | | | | | | | 20 |
| 21 | | | | | | | | | | 22 |
| 23 | | | | | | | | | | 24 |

PANEL F (1ST FL.) VOLTAGE 120/208 3 PHASE 4 WIRE MOUNTING SURFACE

MAIN BREAKER _____ MAIN LUGS 100 AMP MAIN FEEDERS #2 SER (XHHW)

| CIRC. NO. | LOAD | KW | CB/P | WIRE SIZE | ABC | WIRE SIZE | CB/P | KW | LOAD | CIRC. NO. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | HVAC-7 | 16 W | 15/2 | #14 | | #12 | 20/1 | 1.26 | CORRIDOR & STAIR OUTLETS | 2 |
| 3 | | 16 W | | | | #14 | 15/1 | .6 | CORRIDOR & STAIRS LIGHTS & FANS | 4 |
| 5 | STAIR & MECH LIGHTS & OUTLETS | .6 | 20/1 | #12 | | #12 | 20/1 | .6 | MEDIA OUTLET | 6 |
| 7 | PANEL E FEEDER | 5.04 | 60/3 | #4 SER ALUM. | | #12 | 20/1 GFCI | .72 | A/C OUTLETS | 8 |
| 9 | | 5.04 | | | | #12 | 20/2 | 1.0 | STAIR #2 HEATER | 10 |
| 11 | | 5.04 | | | | | | 1.0 | | 12 |
| 13 | HVAC-6/7 CONDENSER | 1.35 | 25/2 HACR | #10 | | #12 | 20/1 | .6 | SITE LIGHTS | 14 |
| 15 | | 1.35 | | | | | | | | 16 |
| 17 | | | | | | | | | | 18 |
| 19 | | | | | | | | | | 20 |
| 21 | | | | | | | | | | 22 |
| 23 | | | | | | | | | | 24 |

PANEL A-1 (ONE BR.) VOLTAGE 120/208 1 PHASE 3 WIRE MOUNTING RECESSED

MAIN BREAKER _____ MAIN LUGS 125 AMP MAIN FEEDERS #1/0 ALUMINUM SER CABLE (XHHW)

| CIRC. NO. | LOAD | KW | CB/P | WIRE SIZE | SINGLE PHASE PANEL | WIRE SIZE | CB/P | KW | LOAD | CIRC. NO. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | ELECTRIC RANGE | 4.0 | 40/2 | #6 | | #10 | 30/2 | 1.9 | HVAC-1 | 2 |
| 3 | | 4.0 | | | | | | 1.9 | | 4 |
| 5 | APPLIANCE CIRCUIT | 1.5 | 20/1 AFCI/GFCI | #12 | | #12 | 20/2 HACR | 1.13 | HVAC-1 CONDENSER | 6 |
| 7 | APPLIANCE CIRCUIT | 1.5 | 20/1 AFCI/GFCI | #12 | | | | 1.13 | | 8 |
| 9 | BATH OUTLET | 1.5 | 20/1 GFCI | #12 | | #14 | 15/1 AFCI | .7 | REFRIGERATOR | 10 |
| 11 | DISHWASHER | .8 | 15/1 AFCI/GFCI | #14 | | #14 | 15/1 AFCI/GFCI | .7 | DISPOSER | 12 |
| 13 | WASHER | 1.2 | 20/1 AFCI/GFCI | #12 | | #10 | 30/2 | 2.8 | ELECTRIC DRYER | 14 |
| 15 | LIGHTS & FANS | .5 | 15/1 AFCI | #14 | | | | 2.8 | | 16 |
| 17 | OUTLETS LIVING ROOM | 1.44 | 15/1 AFCI | #14 | | #12 | 20/1 AFCI | 1.5 | DINING OUTLETS | 18 |
| 19 | OUTLETS BEDROOM | 1.26 | 15/1 AFCI | #14 | | #10 | 30/2 | 2.25 | WATER HEATER | 20 |
| 21 | MICROWAVE/RANGE HOOD | 1.2 | 15/1 AFCI | #14 | | | | 2.25 | | 22 |
| 23 | | | | | | | | | | 24 |
| 25 | | | | | | | | | | 26 |
| 27 | | | | | | | | | | 28 |
| 29 | | | | | | | | | | 30 |

PANEL A-2 (ONE BR.) VOLTAGE 120/208 1 PHASE 3 WIRE MOUNTING RECESSED

MAIN BREAKER _____ MAIN LUGS 125 AMP MAIN FEEDERS #1/0 ALUMINUM SER CABLE (XHHW)

| CIRC. NO. | LOAD | KW | CB/P | WIRE SIZE | SINGLE PHASE PANEL | WIRE SIZE | CB/P | KW | LOAD | CIRC. NO. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | ELECTRIC RANGE | 4.0 | 40/2 | #6 | | #6 | 50/2 | 2.8 | HVAC-2 | 2 |
| 3 | | 4.0 | | | | | | 2.8 | | 4 |
| 5 | APPLIANCE CIRCUIT | 1.5 | 20/1 AFCI/GFCI | #12 | | #12 | 20/2 HACR | 1.13 | HVAC-2 CONDENSER | 6 |
| 7 | APPLIANCE CIRCUIT | 1.5 | 20/1 AFCI/GFCI | #12 | | | | 1.13 | | 8 |
| 9 | BATH OUTLET | 1.5 | 20/1 GFCI | #12 | | #14 | 15/1 AFCI | .7 | REFRIGERATOR | 10 |
| 11 | DISHWASHER | .8 | 15/1 AFCI/GFCI | #14 | | #14 | 15/1 AFCI/GFCI | .7 | DISPOSER | 12 |
| 13 | WASHER | 1.2 | 20/1 AFCI/GFCI | #12 | | #10 | 30/2 | 2.8 | ELECTRIC DRYER | 14 |
| 15 | LIGHTS & FANS | .5 | 15/1 AFCI | #14 | | | | 2.8 | | 16 |
| 17 | OUTLETS LIVING ROOM | 1.44 | 15/1 AFCI | #14 | | #12 | 20/1 AFCI | 1.5 | DINING OUTLETS | 18 |
| 19 | OUTLETS BEDROOM | 1.26 | 15/1 AFCI | #14 | | #10 | 30/2 | 2.25 | WATER HEATER | 20 |
| 21 | MICROWAVE/RANGE HOOD | 1.2 | 15/1 AFCI | #14 | | | | 2.25 | | 22 |
| 23 | | | | | | | | | | 24 |
| 25 | | | | | | | | | | 26 |
| 27 | | | | | | | | | | 28 |
| 29 | | | | | | | | | | 30 |

PANEL B-1 (TWO BR.) VOLTAGE 120/208 1 PHASE 3 WIRE MOUNTING RECESSED

MAIN BREAKER _____ MAIN LUGS 125 AMP MAIN FEEDERS #1/0 ALUMINUM SER CABLE (XHHW)

| CIRC. NO. | LOAD | KW | CB/P | WIRE SIZE | SINGLE PHASE PANEL | WIRE SIZE | CB/P | KW | LOAD | CIRC. NO. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | ELECTRIC RANGE | 4.0 | 40/2 | #6 | | #6 | 50/2 | 2.8 | HVAC-2 | 2 |
| 3 | | 4.0 | | | | | | 2.8 | | 4 |
| 5 | APPLIANCE CIRCUIT | 1.5 | 20/1 AFCI/GFCI | #12 | | #12 | 20/2 HACR | 1.13 | HVAC-2 CONDENSER | 6 |
| 7 | APPLIANCE CIRCUIT | 1.5 | 20/1 AFCI/GFCI | #12 | | | | 1.13 | | 8 |
| 9 | BATH OUTLET | 1.5 | 20/1 GFCI | #12 | | #14 | 15/1 AFCI | .7 | REFRIGERATOR | 10 |
| 11 | DISHWASHER | .8 | 15/1 AFCI/GFCI | #14 | | #14 | 15/1 AFCI/GFCI | .7 | DISPOSER | 12 |
| 13 | WASHER | 1.2 | 20/1 AFCI/GFCI | #12 | | #10 | 30/2 | 2.8 | ELECTRIC DRYER | 14 |
| 15 | LIGHTS & FANS | .7 | 15/1 AFCI | #14 | | | | 2.8 | | 16 |
| 17 | OUTLETS LIVING ROOM | 1.44 | 15/1 AFCI | #14 | | #12 | 20/1 AFCI | 1.5 | DINING OUTLETS | 18 |
| 19 | OUTLETS BEDROOM | 1.26 | 15/1 AFCI | #14 | | #10 | 30/2 | 2.25 | WATER HEATER | 20 |
| 21 | OUTLETS BEDROOM | 1.23 | 15/1 AFCI | #14 | | | | 2.25 | | 22 |
| 23 | MICROWAVE/RANGE HOOD | 1.2 | 15/1 AFCI | #14 | | | | | | 24 |
| 25 | | | | | | | | | | 26 |
| 27 | | | | | | | | | | 28 |
| 29 | | | | | | | | | | 30 |

PANEL B-2 (TWO BR.) VOLTAGE 120/208 1 PHASE 3 WIRE MOUNTING RECESSED

MAIN BREAKER _____ MAIN LUGS 125 AMP MAIN FEEDERS #1/0 ALUMINUM SER CABLE (XHHW)

| CIRC. NO. | LOAD | KW | CB/P | WIRE SIZE | SINGLE PHASE PANEL | WIRE SIZE | CB/P | KW | LOAD | CIRC. NO. |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | ELECTRIC RANGE | 4.0 | 40/2 | #6 | | #6 | 60/2 | 3.8 | HVAC-3 | 2 |
| 3 | | 4.0 | | | | | | 3.8 | | 4 |
| 5 | APPLIANCE CIRCUIT | 1.5 | 20/1 AFCI/GFCI | #12 | | #12 | 20/2 HACR | 1.4 | HVAC-3 CONDENSER | 6 |
| 7 | APPLIANCE CIRCUIT | 1.5 | 20/1 AFCI/GFCI | #12 | | | | 1.4 | | 8 |
| 9 | BATH OUTLET | 1.5 | 20/1 GFCI | #12 | | #14 | 15/1 AFCI | .7 | REFRIGERATOR | 10 |
| 11 | DISHWASHER | .8 | 15/1 AFCI/GFCI | #14 | | #14 | 15/1 AFCI/GFCI | .7 | DISPOSER | 12 |
| 13 | WASHER | 1.2 | 20/1 AFCI/GFCI | #12 | | #10 | 30/2 | 2.8 | ELECTRIC DRYER | 14 |
| 15 | LIGHTS & FANS | .5 | 15/1 AFCI | #14 | | | | 2.8 | | 16 |
| 17 | OUTLETS LIVING ROOM | 1.44 | 15/1 AFCI | #14 | | #12 | 20/1 AFCI | 1.5 | DINING OUTLETS | 18 |
| 19 | OUTLETS BEDROOM | 1.26 | 15/1 AFCI | #14 | | #10 | 30/2 | 2.25 | WATER HEATER | 20 |
| 21 | OUTLETS BEDROOM | 1.23 | 15/1 AFCI | #14 | | | | 2.25 | | 22 |
| 23 | MICROWAVE/RANGE HOOD | 1.2 | 15/1 AFCI | #14 | | | | | | 24 |
| 25 | | | | | | | | | | 26 |
| 27 | | | | | | | | | | 28 |
| 29 | | | | | | | | | | 30 |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PROJECT:

# TANNER'S CREEK MANOR

58 DOUGHTY ROAD,
LAWRENCEBURG, IN 47025

DRAWING TITLE:

ELECTRIC PANELS

DATE: 06/26/2026
REVISED:

GEORGE J. KONTOGIANNIS REGISTERED No. AR00034309 STATE OF INDIANA ARCHITECT

GEORGE J. KONTOGIANNIS, LICENSE #AR00034309
EXPIRATION DATE 12/31/2027


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- ☐ SUBMISSION SET 06/27/2025
- ☐ ZONING SET 05/07/2026
- ■ BID SET 06/26/2026
- ☐ PERMIT SET
- ☐ CONSTRUCTION SET

E3-2


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